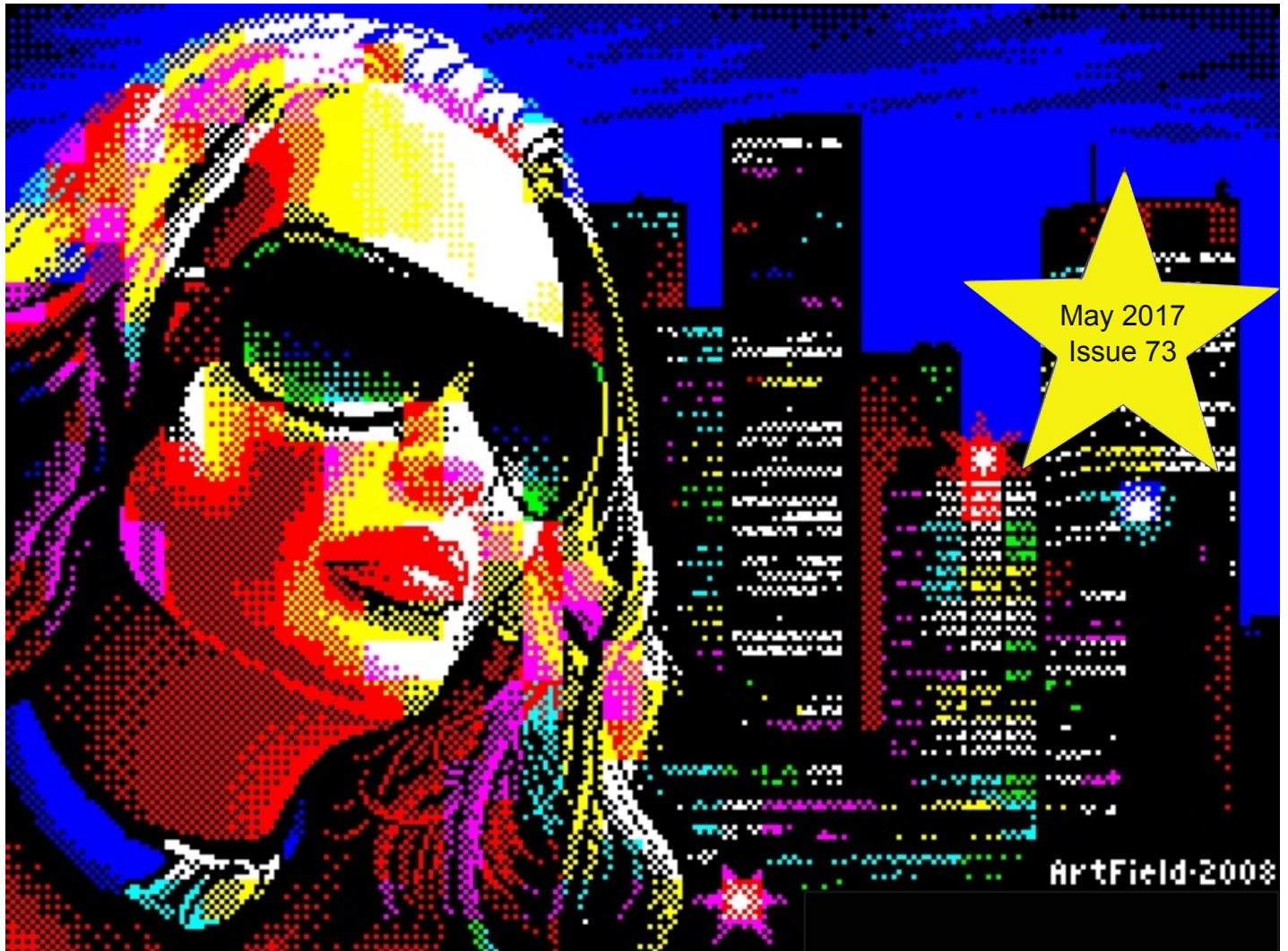


SUC-SESSION

THE SINCLAIR ZX SPECTRUM MAGAZINE



May 2017
Issue 73

ArtField-2008

HOW I GET TO THE OVER 30S PARTY FOR THE SPECCY?

The newest about hardware,
software and events for the
ZX Spectrum



FOR SUBSCRIBERS WITH SCENE+ DISK/TAPE

The newest and best programs delivered to your door

EDITORIAL

Dear readers,
it is already common that I speak in the editorial about, that the issue is already late. In fact, sometimes the time passes by simply as in flight, but the work always went on unchallenged. The best thing you can do to make the issues appear faster is to send us articles.

If you look at the articles in this issue, there are of course more than the few authors behind it. The news collected in the editorial office comes from all over the world and all sorts of sources, which of course have to be published. Nevertheless, more cooperation is welcome and will be rewarded.

Of course, our main work as editor is to create the magazines, but not just that. For the 35th anniversary of the Spectrum, we have set ourselves the task of organizing a Spectrum meeting and of course not just a normal one! As a partner, we have been able to win the "Center for computing history" in Cambridge (GB) and the meeting will take place in their rooms. It is already clear that it will be an extraordinary event with many guest speakers; No question, the spectrum is again in demand in England again. Nearly 5000 Vega buyers speak a clear language.

Also to Germany spills a lot over and so also to our club. We have never been able to welcome so many new readers, but the gap of almost 9 months has been quite long between the issues. Once again we vow to improve, the conditions are there because I have solved some private problems and can now focus more on this task.

2017 will offer us a lot: the VEGA + is about to be delivered, the Spectrum NEXT will change the entire Spectrum world and of course we will celebrate with you all on the Spectrum35.

So be happy also on the rest of the year the moment it goes steeply upwards.

Have fun with this issue,

Mirko and Thomas

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IMPRINT

The SUC-Session magazine appears in German and English and can be subscribed together with the Disk-Magazine SCENE+ at the Spectrum-User-Club.

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NEWS IN SHORT

Defender of the Crown – Cinemaware

One of the most famous Amiga titles has now its official appearance on Spectrum. As there was never an official version before, CAT from Hungary made an unofficial version in 1989. This version was really good and so finally Cinemaware is offering this version as official release. This release, almost 30 years later, is the complete version and in difference to the hacked version that can be downloaded from various sites, this release contains the loading picture. Besides that it is still the same game as in 1989, but now in an official box and also with a second tape included that contains the soundtrack.

As there was nothing that should be improved in the old version, I can



understand that they release it unchanged. It is limited to 250 pieces and can get ordered on the following website: <http://retro.cinemaware.com/product/defender-of-the-crown-zx-spectrum/>

Packer for Spectrum files on PC

A new packer made by Busysoft from Slovakia has been released, optimized for Spectrum Files. The program runs on all Windows32 versions and can also be adapted for Unix. The result is better than the well-known pack programs on PC, with the advantage that the finished program is naturally unpacked on the spectrum. Download the program from:

<http://busy.speccy.cz/download/lzxpac01.rar>

This is also an option we might want to use when creating the SCENE +.

MB Commander 2.6

After many years there is again an update for the MB Commander, the file program for MB02 User. The version is called MB Commander 2.6- "Hey, Not Too Rough" and has been improved several times and added new options. It is now possible to write a write protection for a hard disk / CF card partition. Download on <http://hood.speccy.cz/dwnld/mbc26.zip>, of course, it will also be on the next MB02 version of SCENE +.

ZYBEX for Kempston-Mouse

Velesoft continues to work diligently for mouse control. ZYBEX deserves special attention as there is a two-player mode and both players can play with a mouse. Of course, a Kempston mouse interface is required, which also provides two mouse connections (master / slave).

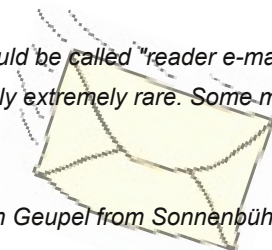
Multi Classic Computing

From the US is a development that is not entirely new, but at least from the marketing point of new areas. The MCC-TV is a mini-computer of the C-64 and Amiga, but also emulates Spectrum, Atari XL / XE and Atari ST. It has not really become clear to me, whether it was already to buy and is currently sold out, or whether the completion is still outstanding. Here is the link:

<http://www.mcchome.arcaderetrogaming.com/>

READERS LETTERS

Hi folks, actually this category should be called "reader e-mails", because real letters we receive only extremely rare. Some mails came, but there may be more.



The beginning is made by Joachim Geupel from Sonnenbühl:

Hello Thomas,

Which text format can you use best?

We can actually process everything in some way. Practically, the RTF format is "rich text format". I edit the texts with Open Office, set the texts with Scribus. Both programs can import just about anything, so WORD and others. Formatting etc., we do not need, since the texts are adapted to our page layout. Therefore pure text files suffice. It would be more difficult to process spectrum texts, e.g. Tasword, but synonymous that goes by principle, since the pure text is still the same ASCII code as at Sinclair times.

Next, Lothar Ebelshäuser from the Eifel writes:

Hello Thomas, * to the end of the year I wanted to report to you again. The last scene + has now been back some time. But the accompanying disk has not arrived yet. What is it? * At the moment I am still busy, everything I get on Cassette, to move on + D. If you know people who want to give their tapes: Always go with it. * In any case, I wish you and your family a beautiful and peaceful Christmas festival and a beautiful and healthy year 2017. *

Actually, I have around the Christmas time the + D and Opus versions of the SCENE + finished and sent. This was very time-consuming, also due to the fact that programmers now make life with copy protection difficult again, with PD software, actually unnecessary. Cassettes can be bought quite cheaply on Ebay, often pre-recorded music cassettes. It is certainly no mistake to

set up a warehouse as a precaution.

Lothar then got the SCENE + and reacted immediately:

Hello Thomas, yesterday I got the + D disk, and am really excited. I have not done everything yet. But what I have seen so far, I like very well. Of course it is okay, the more text belongs in the Suc session. Today I sent you a letter.

Contents: 1 diskette and a stamp. For the game Castlevania.

Thank you for the return.

In fact, Lothar was the only one who had requested the + D version of Castlevania. You can even report more and get the exclusive multi-load version.

Again Joachim from the first letter, also had a question:

Hello Thomas,

Do you know who developed Harlequin?

The info I need for the Sinclair computer corner on my website.

Not exactly. The basis is the ULA book:

<http://www.zxdesign.info/book/>

By Chris Smith. It was only with the knowledge of this book that it was possible to build a new spectrum, including the VEGA and probably all other new Spectrum-compatible devices.

The Harlequin comes from Spain and I have already bought sets, but the people who sell such a set are often not the developers, therefore I do not know in the case really. Surely this is a good question for the forum, but there is also someone who knows the answer and suns can write a small e-mail.

HISTORY OF SUC-SESSION UND SCENE+

In September 1983 appeared the first magazine of the Spectrum-User-Club „SPECTRUM-CLUB-INFO“ made by Rolf Knorre in Wuppertal. This worked until 1993, in January 1994 I took over the magazine and made now a A5 fanzine monthly. The magazine was completely produced on the Spectrum and just called „Clubinfo“.

After making a poll we renamed the magazine in July 1994 to „SUC-Session“. In 1995 and 1996 some single issues were made on PC and since 1997 it is entirely produced on PC.

In 1998 we merged with the ASC (Austrian Spectrum Club) and the SCENE+ started as a coverdisk on SUC-Session. 2002 we started to offer our magazines also as cheaper PDF and TAP-Download. From the July/August issue on until today Mirko Seidel took over the editorial of the SCENE+.

In August 2007 we decided to stop the SUC-Session magazine which only appeared now quarterly. So issue 210 was the last one until 2015. As there were several other magazines in that time, we decided to concentrate on the unique SCENE+ diskmagazin. But then other magazines disappeared and we felt it is necessary to add a newsletter for our subscribers. This newsletter got bigger and bigger and lead finally to the resurrection of the SUC-Session in 2015. As the new SUC-Session has now the same issue numbers as the SCENE+, we are now back at issue 73.

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Type in and be surprised:

```
10 FOR Y= VAL "-8" TO VAL "9":
  FOR X= VAL "-8" TO VAL "16"
  " : LET P= SGN PI : IF X >=
  -P AND X <= P+P OR Y >= -P
  AND Y <= P+P THEN LET P= VA
  L "7": IF ABS X= SGN X OR A
  B$ Y= SGN Y THEN LET P= VAL
  "2"
20 PRINT PAPER P; BRIGHT P= VA
  L "7"; " " : NEXT X: PRINT :
  NEXT Y
```

128 BASIC



Foreword

As an electronics engineer who has turned his hobby into a profession and then a hobby again, I am always looking for ideas that are worthwhile, implemented and put into practice. Old electronics magazines are excellent for this purpose. The reasons are easy to understand: If you are looking at a current electronics magazine today, you can find projects that are all great, but they are only a bad idea because they are usually equipped with a microcontroller, FPGA or programmable logic chip, A PIC. In order to understand these projects you need the appropriate equipment, which is quite a bit of money. Therefore, my interest is more the older magazines, whose projects are still to be understood, since they are usually discreetly constructed. And why this long preface? Very easily! On the website of the VzEKc e.V., Peter Sieg has posted the link <http://s1.nonlinear.ir/epublish/magazine/> which contains the most editions of the electronics magazine ELEKTOR. These are all in English, interestingly from India.

When I was browsing, I discovered the following article which Thomas will hopefully bring into a legible form. This article appeared in ELEKTOR 2/88, the month when my daughter was born.

Greetings, Joachim

CLIVE SINCLAIR: SUPER ELECTRONICS ENTREPRENEUR

by Martin Ince

As both a leading developer of original ideas in the electronics industry and a businessman who pioneered mass marketing of his products well below the prices of his rivals. Sir Clive Sinclair has firmly established himself as the best known Britain in his field today.

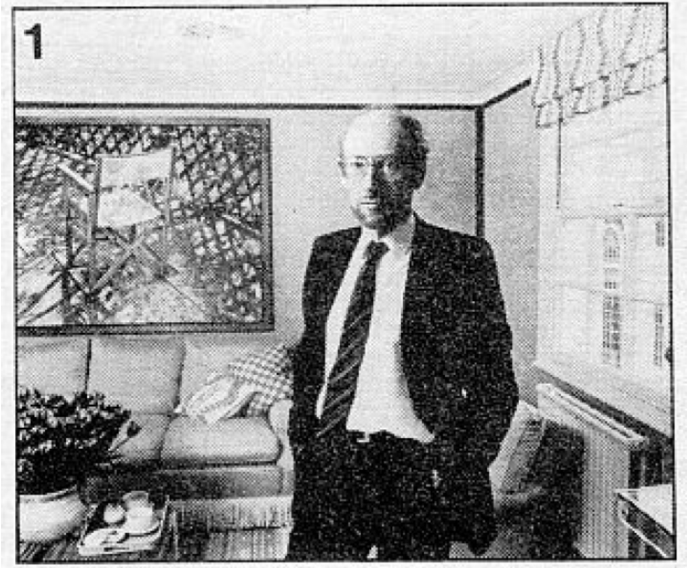
A public opinion poll a few years ago in the United Kingdom placed him in a list of the top ten scientists of all time alongside Leonardo da Vinci and Albert Einstein, although he has no professional academic background and did not even go to university. After over 25 years in business, he is still producing ideas for new electronic products and launching the firms to manufacture them.

To achieve this, he often drives research teams to turn his ideas into products ahead of the competition worldwide. But his commercial origins lie in technical fields far removed from the wafer scale chips and portable telephones that now dominate his business plans.

Early commercial pursuits

It is noteworthy that his early days offer little clue that he would become the one individual associated in many people's minds with the spread of high technology products into everyday life. He left school at 17, with a less than glittering academic record, and before starting his career as an independent businessman, he was employed on a magazine for amateur electronics enthusiasts, *Wireless World*.

The publication is famous throughout electronics and communications, and for publishing Arthur C. Clarke's 1945



futuristic article on geostationary communications satellites—creations that now dominate international telecommunications.

His first company, Sinclair Radionics, opened its doors in 1962 and in many ways marked the start of his career as an electronics entrepreneur. Its business was to supply kits to radio amateurs who wanted to make their own equipment, but had previously had to go to a variety of sources for the necessary parts.

The idea was ingenious and worked comparatively well, but lacked the other key ingredient of Sinclair's business projects in recent decades - the possibility of a mass market for the product. There simply are not millions of people wanting to build their own radios.

However, there was a potential mass market for his next generation of products — a range of cheap calculators and digital watches designed (in another Sinclair hallmark) to make sophisticated equipment available at well below the prices of rival suppliers.

Low cost computers

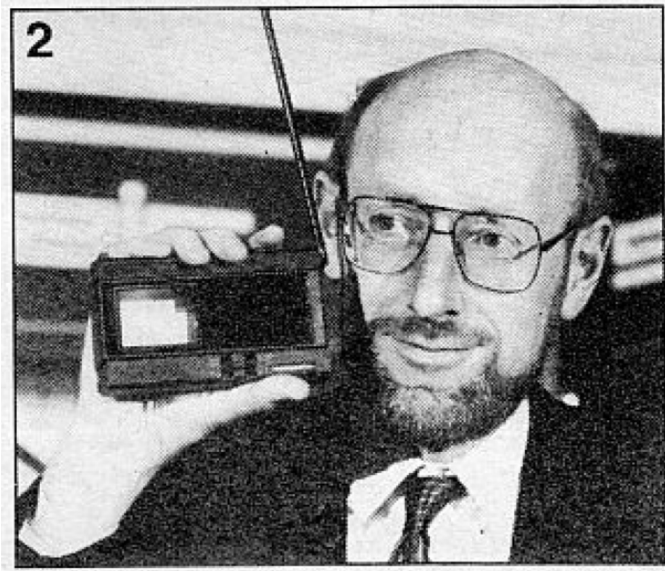
While some satisfied users of Sinclair calculators are still to be found in the United Kingdom, the increasing competition from Far Eastern and other major suppliers of cheap consumer electronics soon meant that these products — commercial successes when they were launched — ceased to be major money-spinners. But by now his attention was on another market—that for computers — where his name would be made on a wider scale.

At this stage, his tactic was to produce a computer for under £100 — vastly less than the price of the Apple machines then sweeping the world. The result of Sinclair's computer development programme was a series of machines of

increasing power, starting with the ZX80 and proceeding through the ZX81, the Spectrum (regarded by the experts as the best Sinclair computer) and the QL (for Quantum Leap).

Bild 2: Sir Clive Sinclair and his miniature television receiver

Sir Clive's vital role in British electronics has been to open up



markets for sophisticated goods at low prices, sometimes in a way that has benefited competitors more than himself.

His own computers were not best-sellers in the long term, and his interests in this field have now been sold to Amstrad, the firm that has popularized home computing and word processing in the United Kingdom. Another Sinclair product, the C5 electric car, which is no longer on the market, was even less of a success, this time because of technical problems with the vehicle itself.

High technology telephones

But he shows no signs of bowing out of the high technology business. He is a director and part owner of a new firm, Shaye Communications, which plans a new, miniaturized form of portable telephone for business and private users. This time the aim is to produce a portable telephone at about half the size and a fifth of the price of existing machines, with a retail price of about £200.

The idea is to manufacture a telephone that can be used via a network of public access points, providing a route into the general network and therefore offering many advantages over cellular telephony. Because Britain has an acute shortage of radio spectrum space, the telephones would economize on radio spectrum space and would be less prone to interference and eavesdropping than existing cellular phones.

Moreover, Sinclair recently launched his latest computer, the Z88, a cheap laptop machine costing about £230, weighing less than 4kg and under 3cm thick, it cannot be sold under his name,

however, because Amstrad now has the rights to call a computer a Sinclair. Instead, it is sold by Sir Clive's new firm, the Cambridge Computer Company. Despite missing out on university himself, Sinclair has long found Cambridge a congenial site for his high technology companies.

He also has plans to tackle the highest levels of computer technology via a new firm called Anamartic, which aims to develop a wafer scale electronic memory. British banks have put several million pounds sterling behind the company, which proposes to produce a practical memory on which the chips used are connected on a single wafer, allowing more speed and scope than existing memory devices.

Same Sinclair thinking

Sinclair must hope that Anamartic will live up to its name, which comes from the Greek for "faultless". His idea of establishing a British presence in wafer scale memory technology is undoubtedly ambitious. The technology is one that other British manufacturers would probably choose to import from Japan or elsewhere, but he did run Europe's largest calculator manufacturer at a time when that area was thought to be beyond the scope of Britain's own electronics industry.

Anamartic bears clear signs of traditional Sinclair thinking. If the technology developed at his Metalab development center in Cambridge works, it will provide a breakthrough in cost and simplicity, which will allow computers to be yet cheaper, smaller and more available.

The first market Anamartic wants to tackle is business automation, including manufacturers of office workstations. But anyone who knows Sir Clive's taste for taking technology to consumer markets cannot doubt that this will be his next stop if it proves a success.

NEBULA SPECTRUM ULA CHIP REPLACEMENT MODULE

The ULA is the heart of the Spectrum. The Spectrum was at the time largely made of common parts, but the ULA is a development of Sinclair commissioned by Ferranti. The problem here is, of course, that this is available as a spare part only to a limited extent and is now hardly any more to get. The Spectrum 48k with 2 ULA variants and the Spectrum 128 and +2 (grey) with another ULA variant are affected. In the +2A / +3, the ULA was replaced by another chip produced by Amstrad, but the problem remains the same, even this chip is hardly available anymore.

Decades later the secrets of the ULA were aired in the book "The ZX Spectrum - How to design a microcomputer" and the door opened for developments. The result was not only clones like the Harlequin or VEGA, but now finally also what for the preservation of the old devices "NebULA".

"NebULA" has been developed as a replacement ULA for the 48k spectrum. For this purpose, a programmable logic chip with several other parts was installed on a small board that fits into the original ULA version. The functions correspond only to those with the original ULA, without extensions (ULA +). It has been tested and worked with Issue 2, 3B and 6A. Theoretically there should be no problems with all other boards, but it is not tested.



Developed (among other things) was "NebULA" by Phil Ruston, which runs a replacement shop called RETROLEUM. Here the replacement ULA can be ordered at the moment (limited

availability, the boards are handmade):
<http://store.retroleum.co.uk/zx-spectrum-chips>

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PLAYZX A PROGRAM-COLLECTION FOR THE ZX SPECTRUM

Joachim Geupel

Hello everyone,
recently on a sunday afternoon i was bored. I was sitting on the sofa gazing holes into the sky. Eventually i was fed up doing so because it didn't work. Then my attention went to my smartphone, perhaps there was an interesting game to find in the PlayStore.

Until recently i had a ZX Spectrum emulator installed on it but it didn't convince me so i de-installed it again. So i entered 'ZX Spectrum' hoping to find a better one but i didn't succeed. Instead i found a program that was even more interesting – at least for people like us who own an original ZX Spectrum or a clone.

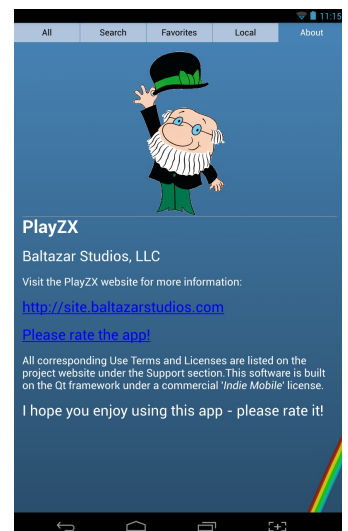
The program, err 'app' i found is called 'PlayZX' and is a true treasure chest of programs – concerning professional programs as well as games from different magazines.

Here is an excerpt from the original text of the web site Baltazar Studios, LLC :

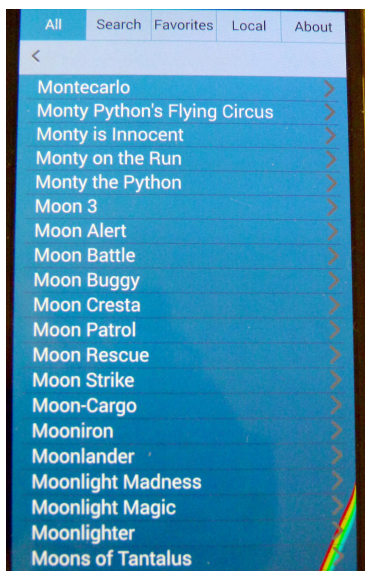
PlayZX is an Android application which lets you select from thousands of Sinclair ZX Spectrum games and play them through the headphone jack to load them onto your Speccy. (...) Note: This is not an emulator, it will not play those games.(...) The application works with a large database of games (over 10,000 titles!) and is able to search for each game on the web. It does that in the background - you simply select a game you want to "play" and within a few seconds the image should be found, converted to sound and played through the audio output on your device.(...)

There are a few thousand games stored in PlayZX and more can be searched in the Internet! Afterwards you can load them into the Spectrum.

To check that i killed an old head phone and made an audio transfer cable with which i could load the games from the smartphone into the Spectrum. The schematics of the cable can be hopefully found farther below. The app works very well at least if you don't start a turbo loader. Most of the time i got a Tape Loading Error there. The usage is very easy: Connect your smartphone to the Spectrum – start the app – select the program – don't forget to increase the volume of



Review from the Spectrum Days 2016 in Cleebrohn Stefan Schomburg June 2016



the phone – enter 'LOAD' on the Spectrum – press the 'start' button on the phone and wait until the program has loaded.

The makers of PlayZX kindly included a bar graph to show the length of the program and the remaining loading time. A small hint for the data cable: As you can see on the drawing, on the smartphone side of the cable there is a common stereo socket. On the Spectrum side there is

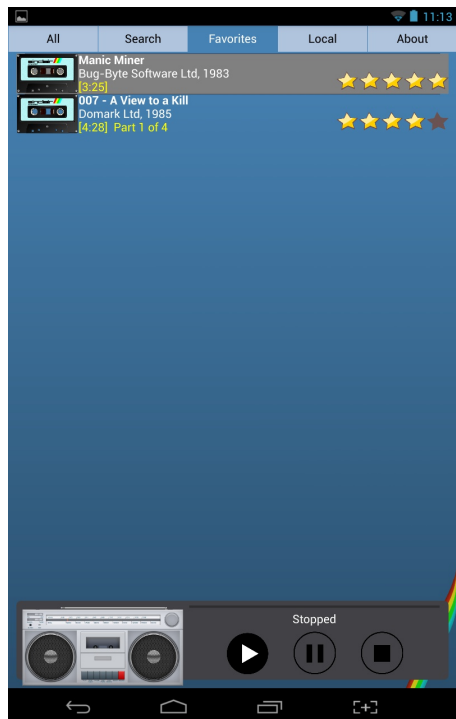
only a mono socket. When making the cable you have to pay attention not to short circuit one of the stereo channels to ground! This could lead to a defect on the smartphone! You can connect the stereo channels to each other because there are no or only small balancing currents between left and right because the volume is identical.

The link to the web site is:

<https://sites.google.com/site/baltazarstudios/>

The name of the program is PlayZX.

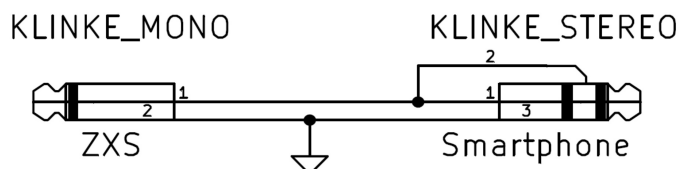
Have fun!



The first Spectrum Days took place in the "House of the nature lovers" in Cleebrohn (located in the north of Baden-Wuerttemberg, roughly between Pforzheim and Heilbronn) from May, 20th to May, 22nd. The event got organized by the former Spectrum-Club leader, Sintech owner and member of the German ZX forum Thomas Eberle. As I'm from the Southwest and live close to the French border, I was quite happy to have a meeting almost in my area and I agreed to participate straight away. For me it was just an hour of driving time, whereas driving to other meetings, like Mahlerts, Wolfhagen or Wittenberg easily takes three, four or six hours.

The drive was quite adventurous. Sure, Cleebrohn is a bit in the middle of nowhere, really pretty with loads of woods, vineyards a little villages in vicinity, but still outside the catchment of the bigger cities like Heilbronn, Pforzheim or Stuttgart. Driving to Cleebrohn was no problem at all, but finding the location was tricky. When I was passing a golf course, my sat-nav stated "You have reached your destination", which made me think. I asked some of the golf players, but they did not even know that such "House of the nature lovers" existed or they were simply afraid I could drive across their holy grass with my car...So kept driving on narrow tarred roads, going deeper into the vineyard. I happened to find an old winemaker and at least he was able to show the right direction to me. There are too many roads and most of them simply end without notice. After numberless transposition maneuvers and excessive cursing I spotted a sign post for the "House of the nature lovers". Later on, I realized that I only would have needed to make a turn AFTER the golf course. Eventually I arrived at the location and found that some of the other attendees ended up on a nearby sports field or in the depths of the vineyard, but in the end everybody made it to the correct location. Thomas had installed some signs, but they could only be read when coming from one direction. Knowing that finding the house wasn't the most simple task, he stopped a car in the vineyard, just because of the fact that it had "ZX" on the number plate. Unfortunately he neither wanted to attend the attend nor he had heard of Sinclair before. Assumably he will never ever come back to Cleebrohn again... ;-)

After I arrived, I got compensated for the stress. Surrounded by woods, meadows and the golf course (just at the other end of it), stood the huge "House of the nature lovers" with benches, playground and BBQ area. The landlady, Thomas and Norbert (crazy he did the ~500km ride to Cleebrohn on his motorbike)



arrived and we could start placing the tables in the room, bringing our boxes in and installing our computer systems. Just when they were up and running, we had to switch them off again, as we agreed on meeting for dinner in the nearby barn-restaurant "Leiterwaegele", situated again at the other side of the infamous golf course. The 10mins walk did certainly not harm anybody. Food, ambience and value for money was excellent (especially for me, having the local prices (Karlsruhe) in mind) and two hours later we returned to our computers. The "Nibbles-plate", with approx. 1kg of deep-fried stuff, I will certainly keep in mind.

The attendees could decide whether they stay overnight in the house or at a nearby guesthouse. I opted for the latter and lay in bed after 1am; I also wanted to be back again as early as possible.

Saturday was the main day of the event and most of the attendees arrived on that day. There was plenty space and we took additional chairs and tables from another room, so we all could sit together in one room and nobody was isolated. We also had two flea markets. One in an adjoining room and one on the regulars' table. From a Disciple interface to a Multiface 3, a mint QL software and book - there was everything you ever wanted to see or buy. Dieter Hucke set up his flea market for charity. All the money he made, went to a protection of cats organization in Romania - great idea!

We spent all Saturday in front of our computers (although we



A white Spectrum Clone

had fantastic weather outside). There were many Spectrums (the event was called Speccy-Days, eh?) with add-on hardware, such as DivMMC, MB-02+, Opus Discovery, Betadisk, ROM Interface etc., but also hardware you don't see that often, like a QL

printer and an Oric Atmos. Groups kept re-organizing, troubleshooting was carried out, circuit diagrams got studied, people did programming and soldering and -



Spectrum with crystal case

playing games.

For lunch we had hot sausages and potato salad. Thomas had also organized drinks. Interesting enough, nobody wanted to touch an apple, but that's not a surprise on a Spectrum-meeting (Thomas' wife kindly did bring them, but over-estimated the awareness of balanced nutrition of the attendeeses)...

Towards evening, the single-day guest packed their equipment, the remaining people ordered pizza and ate outside. Later on we returned to our computers far into the night.

On Sunday morning the computer were switched on again before or during breakfast and discussions continued. At lunch time we started packing and cleaning and we all drove back home. A great weekend came to an end.

Alltogether there were about twelve active attendees. Some of them brought their family and friends.

- Thomas Eberle (Speccyman)
- Stefan Schomburg (schombi)
- Erwin Rattinger (Grautier)
- Norbert Opitz (Norbert)
- Paul Veltjens (Paul)
- Dieter Hucke (Dhucke)
- Bernhard Lutz (Luzie)
- Mirko Seidel
- Fred Duerkes
- Joachim Geupel
- Christoph Odenthal
- Manfred Messerschmidt

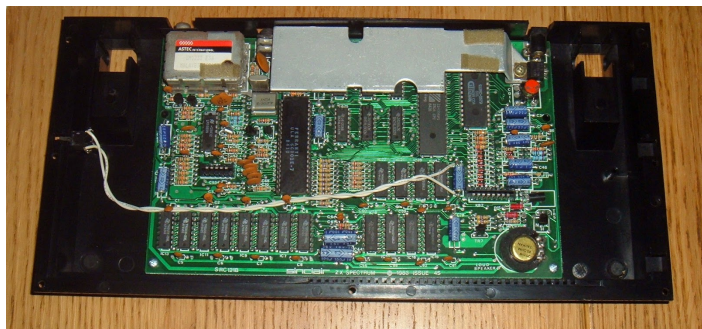
It really was a great event and everybody agreed that it should be done again. A big "Thank you" to Thomas for organizing. I really hope there will be Spectrum-Days #2 soon at that excellent location.



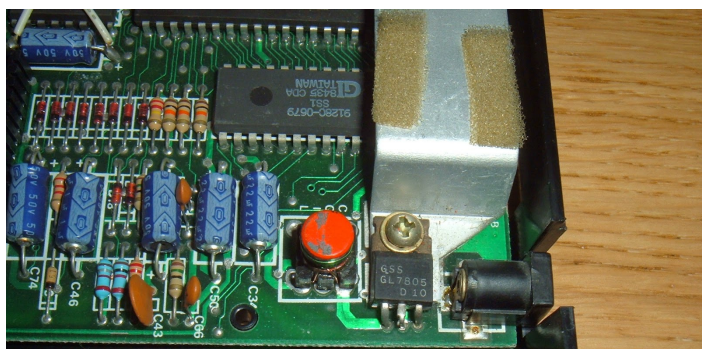
HARDWARE - CORNER

ZX Spectrum Voltage Regulator Replacement

One of the things the Sinclair ZX81 and ZX Spectrums were known for was getting rather warm. If you (carefully) open one up, you'll see where the heat comes from.



This is a Spectrum Plus, but it is the same board as used in the original rubber keyed ZX Spectrum. The big lump of metal at the top is the heatsink.



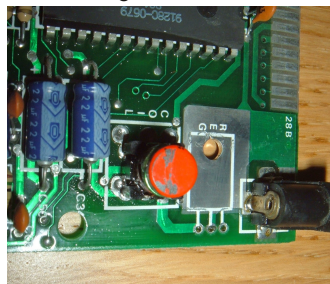
The original circuit uses a 7805 linear regulator. The input for the Spectrum is marked 9V, although most of the Sinclair supplies give around 12V output. The current used depends of the version of the ULA, the manufacturer of the RAM etc, but is around 650mA. Original Spectrum's came with UK700 model supplies (700mA), later ones with UK1400, 1.4A supplies. The regulator is rated 1A, and generated 5V used by the chips on board. The -5V and +12V used by the RAM and video circuits are also derived from the input supply. This is a purely linear shunt regulator, so 5V at 1A is used by the board and eventually converted to heat by the chips (usually the ULA gets the hottest unless something is wrong). The rest, up to 7V and 1A is converted to heat in the regulator, so there could be 7W of heat dissipated by the heat sink, hence why these things get hot. This

works out about 40% efficient.

This is a Traco Power TSR 1-2450 switch mode replacement for a 7805. It takes in the DC in and generates 5V DC out using a switch mode power supply design. This is

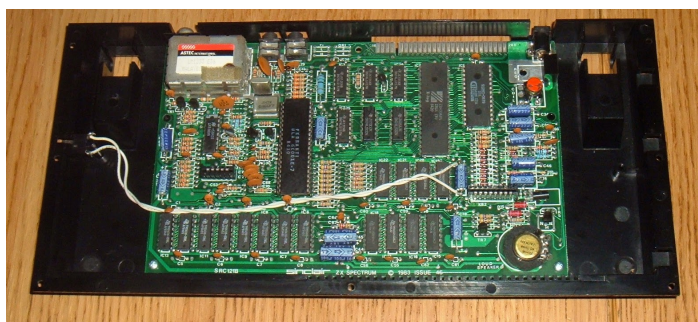


around 90% efficient, and so generates little heat. It also puts less strain on the power supply unit as it draws around half the power of the original for the same output. (7805, 12V @1A to get 5V @ 1A, TSR1-2450, 12V @ 400mA to get 5V @ 1A). The same Spectrum that used about 650mA dropped to 400mA with the new regulator.

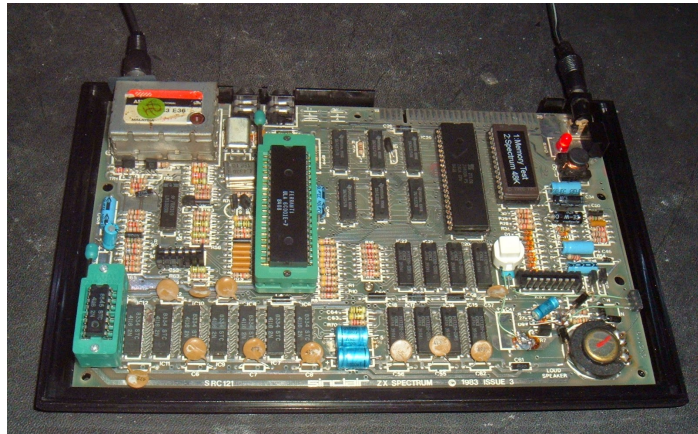


These modules are drop in replacements, so just remove the 7805 and metalwork, and install the switch mode unit. You now have a much cooler running Spectrum.

Usually a good idea at this point to reflow the solder on the DC jack as they can start to become dry joints over time. Even replaced the jack if the connector is tarnished or worn looking.



I use one on my Spectrum test rig as removing the heatsink also gives easier access to the chips behind.



Since this was used without a lid, I used the hole where the heatsink had been bolted to add a power LED.

Find the whole blog at

<http://blog.tynemouthsoftware.co.uk/2014/11/zx-spectrum-voltage-regulator.html>

About the adventure building a Harlequin 128

from Joachim Geupel

At the Wittenberg show in 2015 I have seen it the first time and i was immediately in love – the Harlequin 48! I got the board and the docs from 'Sell my Retro' - the cute computer was built half-

way quick and problem free. So I lined up in the queue of people owning a Harlequin 48. It worked so well that it almost immediately advanced to my favourite Speccy. That's why I wanted to build a Harlequin 128 (Ha128) too. I planned and carried out this project in the dark season, i.e. in autumn and the beginning winter 2016.

At the Wittenberg-Show 2016 I enthusiastically told Ingo Truppel about it: "I've got a board from Don Dindang, I will build now my own Harlequin 128!" - I was very proud of myself. But Ingo replied "Joachim – don't do it! Sell the board and wait for a while!"

Ok I have never listened to people who knew better – also this time. Often enough I got away with it very well.

So I started working on it, according to the motto 'practice makes perfect'.

First I checked what components I already got at home and had to find out that there were barely any besides the few remains from the Harlequin 48. With this list, the parts list for the HA128 and a green text marker I tried to get the missing components from the electronic shops but, to be honest, this was a very difficult task...

At last I entered the parts list into a well known spreadsheet program which indeed made ordering more easy.

The parts came and Joachim started equipping the board. This didn't take much time – like the following eye infection because of my colophonium allergy. Everything went as expected to this point.

But no, not quite – the IC U55 was nowhere to find, except to the empty space on the board. In the circuit diagram, the

equipping plan and on the board this IC was mentioned but not in the parts list – and according to that I ordered the components...

The next day I visited my favourite local electronics dealer, he's the only one left – we already know each other personally. And – you may guess it – there was a gap in the cup board exactly where this IC should have been. There were also no other variations of this IC available. "No one requests this chip – we took it out of store!" was the answer of one of his colleagues. If

this was a thriller you would read here "The shock was deep and pure terror was on his face!" - at last it was not that bad. You could order the chip on Ebay in a set of 10. After a week I was able to continue my work.

At last the Ha128 was finished. Don Dindang kindly supplied me with the really hard to get 28.375 MHz crystal so there were no objections to a first test! But nothing happened! No response on the screen, simply nothing! The current draw was ok and all the chips had the correct voltage, so it should work, but it didn't.

The search for the error became quite exciting. I suspected the voltage regulator but it was ok. The RAMs – innocent, too. A component placement error - my first suspect – again

Information about the Harlequin 128:

The case is from Pollin, shortened for about 10cm. I coloured it anthracite matt

Keys are from Pollin, Marquardt taster. The main keyboard is free wiring, the remote keypad is mounted on a routed and milled board.

The inscription was printed on adhesive labels and painted with normal wood varnish before gluing.

The Sinclair lettering comes from the Internet, the H128 lettering is designed by the author himself

In the case is a 0.5W stereo amplifier, which can be switched off, because due to the work logic, it miserably chirps - but works.

The auxiliary keyboard of the remote keypad is also located in the housing.

On the housing is a green zero-force socket, which allows the quick exchange of the operating system.

The joystick connector is located on the right side.

At the rear are the normal connectors such as Mic, Ear, the monitor output, the Edge connector and the reset switch. The on / off for the stereo amplifier is located above the reset switch.



nothing. The soldering bridges – all perfect. After a while i began to follow the signals starting with the video signal. The video output was dead. My search ended quite fast at the oscillator. There was a signal but it was very weak. At the processor it was sufficient – only the frequency seemed not ok. Instead of the expected 3.5 MHz i measured something above 4.7 MHz – way too high! A check of the crystal lead me to the reason. It had a defect – for whatever reason. Instead of the expected 28.375 MHz it had more than 37 MHz! It was immediately clear to me that the logic components couldn't cope with that speed. However the processor faithfully did its job.

I had several crystals in my collection which i tried one after each other. The 27 MHz crystal lead to the hoped for success. The test ROM had still some errors but thanks to Ingos help they were fixed quickly.

I am now an owner of a HA128 which works quite well, I also

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succeeded in building a case and keyboard, but I am not completely satisfied with it. My Disciple disk interface doesn't work with the HA128 and it is a bit slower because of the 5 percent slower crystal. I have ordered a new crystal from the USA but it didn't arrive yet. But the finished HA128 at least looks good. I have designed a keyboard which is not as beautiful as the one PokeMon offers on Tlienhard.com – but after all...

The Harlequin128 now has its place besides the Harlequin48 in the cupboard and waits for me to get my masculine urge to play and do something with it. Who knows what comes next...

Oh besides, about that "practice makes perfect" - I learned a lot from it, even that Ingo was indeed right...

I want to say thank you again to Ingo at this place, who really helped me a lot. In terms of electronics he is a real champion and i'm in the regional league.

Bye,
Joachim

In the last issue we started a series of articles on last 2 years' software. We started with 2014 titles, this time we will handle 2015, and the next issue will hopefully catch up to the most current titles.

The programs can be found on various internet sites. With regards to games, the World of Spectrum forum helps a lot, they have a separate area for new titles (<http://www.worldofspectrum.org/forums/categories/brand-new-software>) .

More software, especially demos, can be found on www.pouet.net . Some titles can be found by looking at a new program and following the given links from there. Of course, the best programs will be published on SCENE+, so you don't have to look yourselves, at least not for the top hits.

Let's start with games:

Games:

When Alex didn't do it (Retro Phase)

The year 2015 we start with an adventure game – there used to be a time when adventure games had to be reviewed separately from other games – This genre was really independent. During the last years, games that require you to enter textual commands have somehow gone out of fashion. Apparently, we see a return of this fashion now, and we see new pure text adventures as well as adventures using a graphical interface coming up. The latter games (and, apparently, this one as well) often use GAC (Graphic Adventure Creator). This is another trait of adventure games: You don't necessarily need to know how to program in order to be able to build such games – It's more a matter of creativity. This adventure doesn't really distinguish itself from 90ies or even earlier adventures – Not much improvement from there. Maybe this is what bugs me here: Unused potential for improvement.

Onto the story:

After a party, you find yourself back in your house – Everything else you need to work out on your own... First of all: Where's the front door key? The manual claims, the start of the game would be easy – Well, going through all possible actions simply by trial and error because the solution is a bit far-fetched might be considered „easy”– being a bit tricky is a nice thing, but here I sometimes had to shake my head. I try not to spoil anything because I know we have some hard-core adventurers here – But you need a huge amount



of weird imagination. The game is split into three parts, there is no 128k version, so you have to load each part separately and provide a password you got in the earlier part. Graphics are plenty, but, courtesy of GAC, simple, but overall do their job.

The tasks are, as already mentioned, a bit far-fetched in places, but doable as far as I have played. I'm missing a bit of atmosphere, though, and thus, motivation. I always liked to play adventure games, but this one really didn't catch me. I didn't encounter sound in adventures since „Never-ending Story“, it's not really needed. The sheer size of the game is a definite plus, you will encounter a lot of puzzles. A minus is the lack of real motivation to play through the whole game, because already the first tasks are a bit ridiculous. The location descriptions are a bit on the short side and, as mentioned before, I'm missing the real atmosphere. A downside that stems from GAC are the graphics being really simple and drawn line by line to the screen. This is tedious and not really up to date, but there aren't any more modern adventure creation tools. A pity, I think. Obviously, a lot of work has gone into this game, honoured with 50 points. Bottom line: Playable, but you won't miss a lot if you don't.

Uroboros (Ralf)

There was a competition in Poland on the „snake“ topic. This one is the best result of this competition, and the only one offering something really new. The idea behind „snake“ is a snake that grows in length when eating something and you have to watch out for not running into obstacles or into yourselves. Uroboros is based on a Greek mythology creature, and here the aim is to actually catch your own tail once you have reached a certain size, reaching a cycle which closes the level. This really needs some skills, but the only motivation is the high score. You gain more points the longer your snake grows. Graphically nice, but simple. Animation is good, game speed selectable (3 speeds). Really a nice idea and also real fun to play. Sounds have been taken from the large library of Russian artists, and the selection is a valid one. 70 points for that, because it's fun to play. Not more, because the graphics are a bit on the simple side.



Ice Slider Z (Ego Trip)

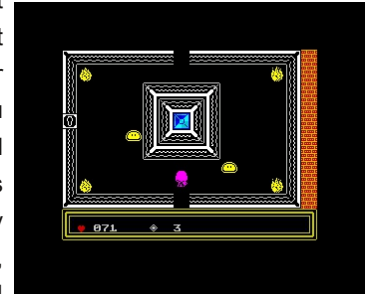
I am in no way against simple games – „2048“ was one of my favourites last year. I was clearly sceptical when I faced another game built with AGD, but I like to be surprised every now and then. In the game you have to collect diamonds and try to not touch the enemies that walk in fixed paths. Two more complications, though: Your figure walks into a given direction until it hits a wall or is directed otherwise. In



addition, and particularly nasty, there are walls that send you off into the opposite direction once you touch them. With those two elements, you are in for a number of surprises – You need a fast hand and fast reactions. Even if graphics and sound (simple beeper noises) are simple, those new ideas pep up the game and it is fun to play. Still quite a simple game, but fun. 60 points.

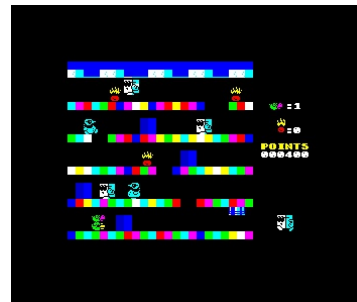
A Prelude to Chaos (Ego Trip)

Ego Trip presents his newest game as a prequel for a much bigger adventure. This is a classic dungeon game with a pretty common task setup: Collect diamonds, collect keys to get to them, collect other items for energy that you lose once you touch one of the plentiful enemies. The game is colourful, but graphics not very detailed. Game speed is good, and some of the enemies I found particularly nasty when they chased me on my tracks. The adventure is well thought out and well made. Like all AGD-based games this one is technically mature, but it is missing the innovative idea. I also miss AY-sound; you can only listen to beeper noise. I like the idea of the replenishable energy instead of Lives. Enemies are nasty, fun to play, so 60 points.



Little Dragon 2 (Gabriele Amore)

Again an AGD-based game, but with good ideas. The little dragon not only has to collect flames, but also destroy its enemies and rescue the baby. On top of that, we get a number of extras. Special blue fields teleport you to somewhere else, other fields blow you upwards. Enemies generally seem to walk on predefined paths, so you can adjust to them. Unfortunately, the game is a bit confusing (or confused?): Already in the first screen, I happened to walk too far to the right and ended up on the left side of the screen – In the middle of a wall. So the game doesn't seem to be free of bugs. The game is colourful, but this is not always useful: During the teleport action the colours disturb clarity. Before you know where you are, the enemies already got you. Obviously, this sort of game is like that, you first lose a life and do better next time. Not my call, though: I think, with reasonable skills you should be able to get out of any situation in a game, which isn't really possible here. Colourful, but scarcely detailed graphics lead to some down vote, non-existent sound as well. 40 points for some good ideas.



Castlevania: Spectral Interlude (Rewind)

After having been announced for quite some time and the advent of a preview demo (that has also been published on Scene+), we're always happy to hear when a game is indeed

ready. Castlevania already has earned some fame on other platforms, but it is a new game on the Spectrum. It is more than just a simple Jump'n Run, adding a lot of puzzle elements.



The evil has to be defeated. Unfortunately, no one has yet told us how. Meeting persons here and there, we simply ask them and get our first assignments. Action is present as well, we are initially armed with a whip, but can buy additional weapons. Money can often be found with killed enemies. More money, more weapons against the enemies that become increasingly difficult to kill. And, puzzles on top.

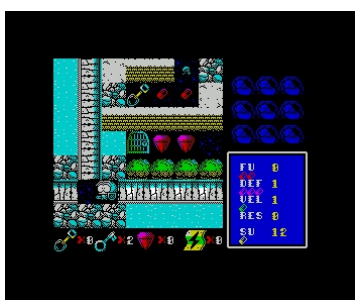


Graphically, the game is really superb. This is just about the best you can achieve on a Spectrum, the sprites are very well animated, graphics are very detailed and varied. No wonder this game wants 128k as a minimum. During the game we can enjoy AY sound that really never gets annoying. There is a nice intro at the beginning and I am sure I will encounter even more surprises once I continue playing. Thus, the gameplay is very good and motivating. In short: This game has everything a game needs to have, I'm offering 99 points, just saving one for whatever more there is to come.

The Tales of Grupp (Retrobytes Productions)

Games featuring mazes are quite common on the Spectrum. Nevertheless, spiced with some new ideas, something new can be made out of it. This game uses some aspects of role playing games. We play a knight who has to collect 12 valuable gems. In order to get them, we have to search through the whole maze, facing enemies who keep us from doing that. Some of them patrol the corridors, others block entrances to other areas. Enemies are of different strength, some of them too strong to be defeated initially. This can be changed, however, with items that can be found in the dungeons: Emeralds can be found that can be used to buy keys or lightings that can be used to shoot at enemies. Collecting various pills can also boost our stats (more energy, more strength, and so on). Just like in a role-playing game you can gain strength and improve the character until you can take up with enemies you couldn't before.

Once you attack an enemy, the screen changes to some sort of attack display. You can attack, defend, or use a lightning. Regardless of whether you defeat the enemy or not, after the fight, you find yourself in the same place you were before, just the enemy is still there or gone. You don't lose a life and can try again with the same enemy, ideally later



when you gained some strength or weapons. The graphics are colourful and very good. The sound is, well, 48k, like the whole game. The characters could maybe be animated a bit better, but overall this is a very nicely made game, that is fun to play. I would have wished to have it translated to English, though, both manual and game are fully in Spanish, not so easy. But, roundabout a recommendation, 80 points.

Rescue Lander (David Pagett)

This game is a proof that AGD games are not limited to platformers. In rescue Lander, you have to rescue the population of a city from meteorites. Because you can't land your ship, you have to evade the meteorites and hover closely over the heads of the refugees to allow them to come aboard. Having done this, you can land your ship on a platform on the opposite side of the



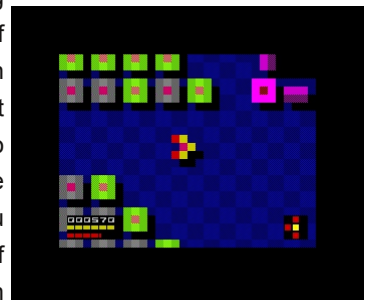
screen and gain a level. What sounds like a fun game to play in the odd minutes, is, unfortunately, a rather frustrating experience, because meteorites enter the screen without the slightest hint from the right, exactly where the target platform is

located. So it's pure luck whether you are being hit there when landing or not. Graphically, the game is rather frugal, the sound is limited to beeper noises. With the meteorite issue solved differently, this would have been a nice game for the occasional minute, but frustrating as it is, it's rather not.

Lirus (Denis Grachev)

The theme of Lirus is (a coincidence?) about a virus. Like they commonly do, it's spreading fast and can only be contained and destroyed by fast-paced action. The game has the virae in containment at the beginning

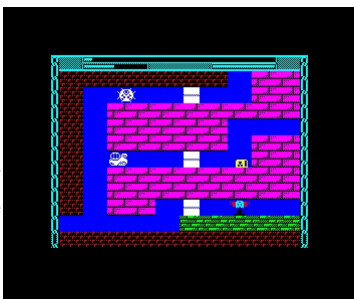
– Once you equip yourself with a laser, you can open Pandora's box and shoot down the virus. You need to be doing this faster than the virus can spread. If only you wouldn't constantly run out of ammunition so fast. You can



actually find more ammo, but while you pick this up, the virus spreads even more. The game is terribly challenging, but fun. Graphics are block graphics on a ZX-81 level, sound is limited to shooting noises. There are both 48k and 128k versions that only differ in the title sound. Why, with this simple graphics, this game still needs 68kB (in the 128k version) is a miracle to me. As I already said, this game is fun, which is most important. Still leaves a bit to be desired, especially in the area of graphics. So, 60 points only.

Bathyscape (Red Triangle)

Bathyscape is a nice small maze game like many others. The unique challenge here is: It is an underwater adventure and, you guessed it, we're running low on oxygen. You have to regularly replenish your oxygen supply, and once you get lost somewhere, it can easily be you don't make it back in time. We've seen that before though, other games have you run low on fuel or energy, here we have scarce oxygen. The graphics seem to date back to 1984, same with the sound. Cleanly programmed, no jerky action, the gameplay is OK – But it's not fun to play. Nothing to write home about. 30 points.



PNOID (Jaime Hormiga)

Pop Penguin lost the eggs and is desperately searching for them. This small adventure hides some surprises, you need to find and thoughtfully use some items to by-pass dangers. The game does, however, look like one of my first tries with AGD (Arcade Game Creator) and it maybe even is (no, not mine, but Jaime Hormiga's). Don't be disappointed, my first tries weren't published as well. But games like this we really have enough already and there really is nothing special with graphics or sound here. Good luck for the next try, but you can spend your time better than with this game. 20 points because it is at least playable.



Christmas Gift Hunt (Stephen Nichol)

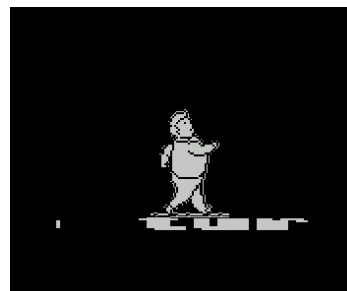
Another AGD game, kudos for the idea to produce a Christmas game. Not a platformer this time, but rather a maze game. Santa Claus lost the presents and has to retrieve them back. The enemies are easily circumvented, this ensures you can actually manage to master the game if you simply invest enough time and search through all of the 80 screens. Sprites are well made, but usage of colour is a bit frugal, nearly anything is either white or red, even items you can pick up are not distinguishable from scenery. Not a game for the odd minute, it is too large for that. It does, however, also not encourage you to spend more time on it – It's simply too boring. I see myself proven one again: AGD helps newcomers a lot to get to a working game, but it results in more mass than class. 20 points as Christmas bonus.



Demo Scene:

Like in 2014, 2015 saw a number of events with contests. Most of the following demos have been created as submissions to these contests.

TDSI (Den Popov and Goblinish)



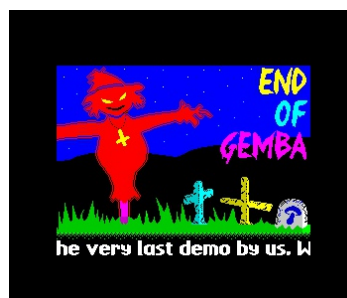
We seem to be back at demos you can simply watch from beginning to end without having to press keys in-between. Very good, but also some weak effects intermix, for example some colour effects have been made with bar graphics – we've seen better than that. Also includes animations, and comes with groovy sound. A mix of good and not so – 55 points.

New View (Conscience)

This demo from the new group Conscience after all made second at the Forever Demo party. Well earned, indeed, the demo includes large fluent animations and didn't shy back from colour sprites. Just the beginning with a car driving simulation is something entirely new – And everything in 48kB, respect! 80 points.



End of Gemba (Gemba Boys)

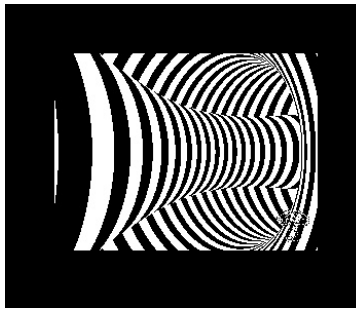


A scroller, some pictures, nice sound. Are we back in the 90ies? No. Never. This demo that announces the end of the "Gemba-Boys" is a joke, so it's about time we come back watching the text. This really is pulling some coder's legs. Some of it can only be followed by insiders, because if you know the guys, you'll find the jokes. I like that, also because this was simply an bonus submission on the Forever 16. The Gemba Boys' "real" submission is next. Only 30 points for some well-made fun, but technically the demo is rather on the weak side.

Back to the Gemba (Gemba Boys)

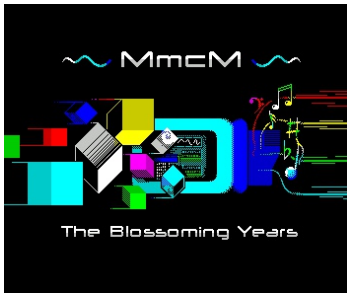
This demo practically had to win Forever16, because half of the Spectrum participants are members of Gemba Boys as well... But this shouldn't diminish the achievement. Even sound alone is again in a class of its own, the rest a very good mix of cool effects. Not all of them are really new, as this gets increasingly difficult, but the tunnel effect incorporating a striped worm (I know I'm trying to describe something un-describable here...) has to be seen to be believed. Generally, the demo runs as a

single piece allowing you to sit back and marvel without having to press any keys. 80 points, some deduction for being too short for my taste and too abrupt of an end. Beyond that, they forgot to include me in the greetings, ...grr.



The Blossoming years – MmcM music album (Hype Allstars)

Some pretty famous Russian coders (Hacker vbi, Skrju, diver, introspec and many more) sat together to present this music collection. Treating the result like a demo here would be



somewhat unfair, after all we're concentrating on the songs – not on the effects. The whole thing is still properly presented together with a short intro, an equalizer accompanies the songs, and the songs themselves are decently made

AY songs. My personal favourites were the last two titles, but overall I don't think the selection really represents the best titles of the Russian demo scene of the last few years. But some of them are really good. The whole thing was by the way presented on the world's biggest demo party, REVISION in Saarbrücken (Germany).

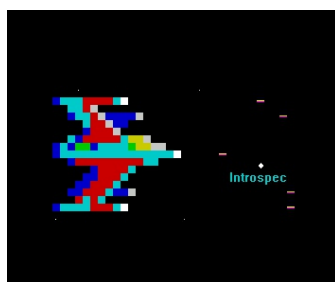
Stellar (Kpacku)



Now, what's this supposed to be? Definitely something different, let's call it "chilly". The demo comes without text, only slowly varying patterns on the screen. Somewhat reminds me of "Conway's game of life", but I'm not really sure on this. The music comes along in a similarly calm manner. Not a lot of action, but simply different. Definitely something to look at, but my personal taste asks for more action, so 25 points only.

The last Star Byter (Misha Pertsovsky)

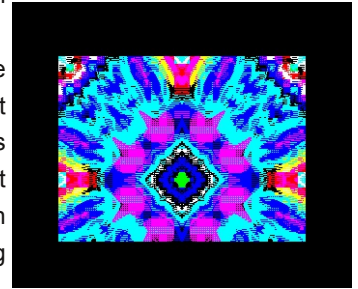
This demo can be regarded from two angles: annoying beeper music, block graphics and jerky animation... or you consider the technical effort: multicolour, beeper and animation synchronously, how's this done? Clearly a "bravo" for the programming, but the result? Kudos for the proof that all this is really doable, but is it worth the effort? Rather not: 20 points because something like that has never been done before.



Religion (The Super)

Whenever I receive a demo made by "The Super" I am really excited. In my opinion, their products always were the best, most surprising demos of the last few years. On the other hand, this also puts some kind of burden onto the programmers, having to outperform themselves again and again.

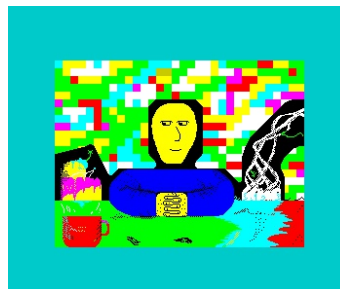
The first striking thing is the groovy sound, not the least bit annoying, fits perfectly. Effects are colourful and new, but not as breath-taking as we've seen before. Colourful raytracing animations are still remarkable,



but only when they really look good and not blocky. The demo has its own style, the plot that religion has not always done good can easily be ignored and the effects considered. Everything blends nicely with the music and fits perfectly. Graphics are colourful and smoothly animated, but too blocky in places, the end comes rather abruptly. I hand over 75 points, all in all still a good demo, but the usual outperforming didn't really go so well this time.

Doing (kabardcomp)

The 3BM open air party is a Spectrum-only event regularly being held in summer in Perm (Russia) since 2011. There are graphics, music and complete demo contests. For this event,

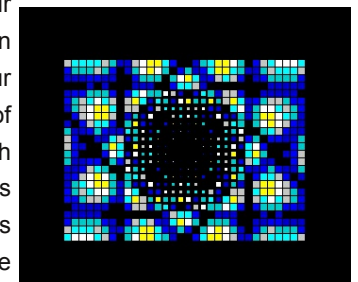


some interesting works have been created, even if this specific demo starts relatively nondescript. I really cannot cover each and every demo in this summary, but I really enjoyed this one ramping up from a simple picture which

then starts being animated and suddenly even the background evolves into animated objects as well. Maybe nothing absolutely special, but at least noticeable. Fans of hard rock will be delighted; the sound is a conversion of Nirvana's Smells like Teen Spirit. From a technical viewpoint, not really a demo that leaves you stunned, but I enjoyed it, the sound and the ideas are worth 40 points.

Eager (to live) (Life on Mars)

When I watched this demo for the first time on an emulator, I had to check the settings, because I thought I had accidentally emulated a Pentevio. I was fascinated by an effect of super smooth and still fast colour scrolling I have never seen before. These scrolled colour patterns are the main effect of the demo, even if it comes with some others besides it. Sound is really good as well, the drums sound close to digital and made



me think I had emulated the wrong computer as well. This demo has deserved to win first place in the 3BM open air party, presented very well. Only the sound repeats pretty early and there could be some more effects. This keeps it from receiving 100 points, I'm offering 90.

Daytrip (Ate Bit and Desire)

The "Sundown" in Britain is no Spectrum party, but still Spectrum demos keep showing up there regularly. Daytrip really is a special type of demo, because it tells a story. A barkeeper



wants to populate his bar a bit more and has an idea...This starts a musical time travel through "Funky Town" and the "Ghostbusters" chase Michael Jackson. Superbly well-made and amusing. As a kid of the 80ies I really enjoyed the sounds and amusedly watched this little "movie" in demo disguise.

80 points for this well-made and elaborate demo. Really good ideas, no sensational effects though, but with good graphics and certainly good sound. Some deductions for some stolen graphics, but this probably had to be for the time travel, but I would really have liked to be it a bit more graphically enhanced. Still a must-see!

Precalculated (Skrju)

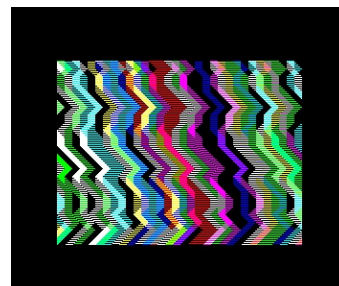
We have always been presenting Skryu demos on Scene+. They regularly are a bit on the melancholic side and mainly consist of pictures, and this one is like that as well. Pictures are of very good quality, a minor effect distorts them every now and then. Small animations in the pictures provide a bit of movement. Sound is calm and a bit bemused. You could easily argue there's nothing new in this demo and Sjrju should include a bit more variation. Or, you simply agree this is just the artist's style and Skrju definitely is an artist. He won't change his style and surprise us. He wants to entertain and make us think. That's what he does. From a pure technical viewpoint there are some deductions, because his techniques are kind of old-fashioned nowadays. Still I consider it positive that he stays true to himself just like a painter or musician who keeps to his personal style. Somewhat undecidedly I'm offering 50 points. A one-time watch.



Kpacku Deluxe (Kpacku)

This demo is playing with colours and resolution. With multi-colour currently being hype on the Spectrum, this demo really brings the Spectrum to its limits regarding colour resolution. This also created some real cool effects, the cubes in multiple colours and 3D really impressed me. The downside is: considerable flicker. Maybe that flicker is going to be resolved

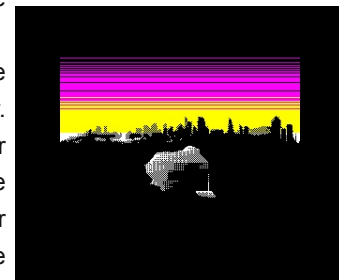
some time in future, in the meantime we have a good demo that deserves having won the Chaos Construction 2015. Various sounds are enjoyable as well, 85 points for a really good implementation of multi-colour.



EIHWAZ (hedj & schaff)

Two – at least for me – new names on the list of demo coders and a good demo ranked third on the Chaos Construction. The demo mainly features animated 3D forms and looks a bit like directly ported from the PC or other computers without specifically being treated for the Spectrum.

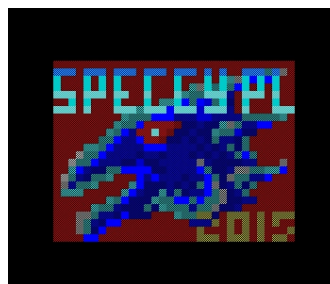
Also, ray-tracing animations are really not the biggest novelty. The sound also doesn't offer anything new or special. In case this is a first of a new coder group, then it's a remarkable debut. Unfortunately, I cannot



claim that, as the Russian demo scene is pretty much a closed shop and coders tend to frequently change their names. From a neutral viewpoint, this demo is a bit old-fashioned and doesn't feature anything new or impressive. So, only 50 points, I'm afraid.

Big things lite (Speccy.pl)

The Speccy.pl guys have done it again – This time they infiltrated Riverwash, a big Polish demo party and presented a Spectrum demo. The demo is very colourful, sound and music blend in very well. Many of the effects have been seen before,



but some (especially the multi-colour) are new. Unfortunately, the demo is a bit on the short side, but certainly did its job on the Riverwash. Because of the brevity: 65 points only, but worth a watch.

SCENE 73

Simultaneously with this release of the SUC session, the SCENE + disk also appears. As always, unfortunately not at the same time; The creation of MB02 version is always the first, but then the time-consuming conversions to + D and Opus, and last also on cassette.

Once again we have a great collection of demos, intros and games. For MB02 users this time as a special utility is the latest version of the MB Commander.

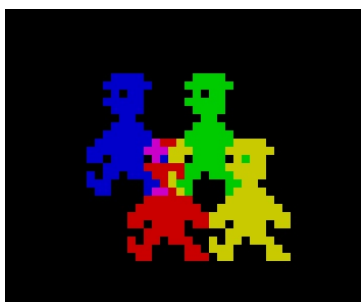
Because of the larger storage space on the MB02 disk it is also possible to put more programs to this version, which we have also done. This version contains, besides the MB-Commander, a demo, a great music collection and two games more than the + D / Opus version. All users also receive the TAP version via e-mail, which contains all programs and can be played on the emulator at least.

Here is an overview of the programs:

1 Intro	LT3D
2 Demo	White Stars
3 Demo	Harder Better Manic Miner
4 Demo	Unshored
5 Intro	Big Things Lite
6 Demo	Rain
7 Sounds	MMCM The Blossoming Years (MB/tap)
8 Intro	Dynx
9 Intro	Self Printing Greetings
10 Demo	You should know Basics (MB/tap)
11 Utility	MBCommander (MB)
12 Spiel	Diurak
13 Spiel	Cousin Horace (MB)
14 Spiel	Ice Slider
15 Spiel	Lirus
16 Spiel	Leonardos Lost Invention (MB)
17 Spiel	Sir Abadol
18 Spiel	Monty's Last Chance
19 Spiel	Mystery
20 Spiel	Popeye
21 Spiel	Sir Froggy

We wish you a lot of fun with the new SCENE +

Mirko and Thomas



CLASSIC COMPUTING 2016

– its tenth anniversary in Nordhorn,
Germany

Already two years before the event, I got notified and so I had surely great expectations. Such long planning phase should make a difference you would think, but I got disappointed somewhat. The hall was huge, maybe the biggest event of that kind I saw so far. The host had done his homework and invited a large number of retailers and users, who were willing to display their treasures.

The commercial part was very much Amiga-focused, which was understandable due to the retro-scene in Germany and the adjacent Netherlands. I was prepared for that and took various Commodore items with me. I got then pleasantly surprised that a few ZX81 freaks with their stuff were located just opposite my booth.

What was most disappointing, was the lack of visitors resp. the lack of resonance. There were about a hundred people offering and showing retro computer stuff and it seemed fairly busy, but real visitors



without a booth, just coming to see the event, I didn't see too many. In town (population of Nordhorn is ~50.000) there was hardly any advertisement or signs making people aware of what's going on and beside from the members of the Classic-Computing Club, people did hardly know about the Classic Computing. It's not easy to advertise such event and get attention and I don't want to blame the organizer; maybe my expectations were simply too high.

At least I could socialize with other people from the retro-scene and exchange views with the retailers, but as I said, there were only a few interested visitors. At other events, such as the VCFC in Munich, this is different. It might have something to do with the fact, that an annual event takes place at the same location and around the same time, whereas the Classic Computing was always held at different locations.

This year the Classic Computing will take place in Berlin and maybe there will be more visitors and popularity than in the somewhat out-of-the way Nordhorn.

The organizer should consider an interval, so one year Berlin,

then the next year Nordhorn – or move the event to Stuttgart. As I found out, about fifty percent of the retailers came from Southern Germany.

Thomas

EVENT CALENDAR

August, 22th - 26th 2017 Gamescom

The biggest Computer and Videogames fair in Europe offers also an area for Retro-Computer. In the größte Messe für Video- und Computerspiele bietet auch einen Bereich für Retro-Computer. In recent years, Norbert Opitz has always held the Spectrum flag with a stand.

During the week 10 am to bis 8 pm, at the weekend 9 am to 8 pm, Kölnmesse, Messeplatz 1, 50679 Köln

September, 02th - 03th 2017 Spectrumania

Still the No. 1 in Germany, the largest Spectrum meeting here and the only regular worldwide. The trip to Wittenberg is always worthwhile.

The opening hours are: Sat. from 8.30am to 7pm and Sun 9am to about 4pm.

Our meeting place is again the Volkshochschule (VHS) in the Falkstr. 83 in 06886 Lutherstadt Wittenberg

Info:

<http://forum.tlienhard.com/phpBB3/viewtopic.php?f=6&t=2147>

September 16th to 17th 2017 Retro Computer Festival

The Center of Computing History opens its doors to anyone who wants to introduce its own collection of retro computers. In addition to many unusual rarities, the Spectrum will be there for sure.

Place: Centre of Computing history, Rene Court, Coldhams Road, CB1 3EW Cambridge

<http://www.computinghistory.org.uk/det/43210/Retro-Computer-Festival-2017/>

October 18th 2017 Spectrum35

Venue with many guests to celebrate the 35th birthday of the ZX Spectrum.

Place: Centre of Computing history, Rene Court, Coldhams Road, CB1 3EW Cambridge

<https://www.facebook.com/groups/1671691609803269/>

07. - 08.10.2017 Classic Computing

The Classic Computing supports all systems, but is very Commodore / Amiga heavy.

German Technical Museum Berlin, Trebbiner Str. 9, 10963 Berlin

<http://www.classic-computing.de/veranstaltungen/cc2017/>



2017 sees the 35th Anniversary of the release of the ZX Spectrum.

In 2012, the Spectrum30 show was a huge success. Now we are doing it again, and it will be bigger and better than before! The first event were are announcing is once again in Cambridge:

SPECTRUM35

– A show to remember –
Saturday, 28th October 2017

This time the venue will take place in the rooms of the "Centre of computing history". Again we will have interesting talks, exhibitions and the ZX Fair with new and old hard- and software to buy.

Of course for this celebration, we want get as many talks as possible. The Oliver Twins have already agreed, and in due course will be announcing other star guests.

At this early stage we cannot tell you much more. We want keep the venue low cost, so the entry fee is the usual musum entry fee of 8,00 GBP. There will be several rooms used for exhibitions and the ZX Fair. There will also be competitions and a price draw.

Gates will open on Saturday 28th October 2017 at 10 am.

Address: Centre of Computing history, Rene Court, Coldhams Road, CB1 3EW Cambridge

We will keep you updated on this site with any news.

Best place to keep updated is our facebook page:

<https://www.facebook.com/groups/1671691609803269/>

However, tickets are limited, so if you want attend, do not hesitate to contact us.

Lee and Thomas
Organizers

TIPPS & TRICKS

In this section we want your game solutions. Our reliable team Hubert and Harald present you in this issue two adventure solutions:

Hello dear friends of adventure games,

In our today's essay, we are again looking at, yes you guessed it, an adventure solution. This time, we chose the "Dungeon Adventure" program. This is a release of the software house Level 9, which in itself is a reference to a comprehensive and challenging game. It was later released as part three of the Jewels of Darkness trilogy.

For the sake of completeness, we should mention the fact that we used the graphic version of the Adventures for our solution.

What is the adventure about for the player?

The player embodies an adventurer who has the task of leaving the central cave system undamaged. Before that, however, the programmer has not only set up very extensive and content-oriented locations, but also a labyrinth of almost endless spaces. In our solution, in which we have not actually visited all the possible places, we came to the 168 locations printed in the plan. So you see, there is a lot to be done. However, to leave the central cave system you need precisely nine specific objects. We will find these in the course of our solution and then use our flight back to civilization. You can find out more about the solution below.

And now a few general notes about the program itself. Before you get closer to the adventure, it is of utmost importance to understand the teleports system, which we will encounter again and again during the solution. When we use it, we save a lot of unnecessary ways, which is not to be despised. In the program, there are a certain number of colored ring-like objects and the same number of posts above which a light shines in the corresponding color. These are located in strategically interesting places. The colors depend on the spectral colors. If one has found and carries such a colored object, and one reaches such a pedestal one goes UP and one is teleported to the pedestal with the associated color. It is a little tantalizing until one has understood, how it works. But as I said, this can also be quite helpful, if it have to be fast. However, caution is advised when we are teleported to the blue pedestal. In order to arrive safely and stay alive, it is advisable to have the right things at hand - but more in the course of the subsequent solution. We have always used this teleport in the course of our solution.

In addition, we need to draw your attention to a few randomly-conditioned actions. The mystical bird will take us to its nest no matter where we are. If this does not happen in the solution, it is best to go in the direction of its nest until it happens and then proceed as indicated. Also there are a few very impractical falling stone blocks (falling boulders).

They always fall over the stairs when we only have two steps up to a safe place. So if the message appears in the text that we hear the sound of falling stones above us, then we should immediately go to the next "gully" and enter "wait" there. We will stay until they have passed us. Now it is safe to move upwards. One last thing. During the day we have only a limited number of moves. So we should not run wild, because we must have found a light source before the sun goes down. If you follow our solution, this should not be a problem for you.

Now we want go on to the game itself and devote ourselves to the solution. Beforehand, however, as usual, the locations and objects that we will visit or find on our trip.

- 001) On a wide stone bridge.
- 002) On a mud bank / huge packing case
- 003) In the box
- 004) On the ceiling of a fine room / chandelier
- 005) On the carpeted floor of a comfortable homely room
- 006) In a large store room / button
- 007) In a gloomy cavern between a row of stalagmites
- 008) In a smooth north-south passage
- 009) At a junction in the round north-south passage
- 010) In a north-south passage / miner's helmet, jewelled crucifix
- 011) On an east-west road south of the river
- 012) On an east-west road south of the river and north of a treeless hill
- 013) On the edge of a impassable field of poppies / poppy seed pod
- 014) On an east-west road beside the river / girl on island
- 015) On stepping stones leading north to an island / girl on island
- 016) On an island south of an angry willow tree with six robbery branches / silver mirror
- 017) On an east-west forest road A
- 018) On an east-west forest road B
- 019) In a clump of bushes on the edge of the forest / assortment of coins, magic wand, dice
- 020) At the edge of the forest below an enormous tree / evil giant
- 021) On a sturdy branch over the clearing / evil giant, ripe berry
- 022) In a forest clearing / belt, dice
- 023) Under the killer-willow tree / axe, carving
- 024) On the side of a steep hill
- 025) In a circle of distorted monoliths
- 026) On a grassy plain
- 027) Below a huge untidy nest / yellow bird
- 028) In a huge nest / large egg
- 029) In a cylindrical room with eight exits / red pedestal
- 030) At the east end of a long room with dozens of pillars / corpse, short bow, orange collar
- 031) At a junction in a steeply sloping u-shaped passage / slab of rock
- 032) In a tall cavern with openings all around
- 033) In a damp hemispherical cavern with an opening to the east / boulder
- 034) In a rock room with an exit to the west / great sword

- 035) In a dead end, matt black room / little octopus figurine
- 036) In a second dead-end black room / staff of polished bone, yellow collar
- 037) At the blocked west end of the pillar room / metal cube
- 038) In an empty stable
- 039) At the stable ends at a haystack / jewelled needle, huge packing case
- 040) On a flight of crumpling steps
- 041) In a steep earthy passage
- 042) In a lower chamber / skeleton guarding a bearded dwarf
- 043) In a wide smelly passage opening to the outside / antique chair, green collar
- 044) In the upper chamber / enormous dragon, golden bed, set of dragon teeth
- 045) At a tight junction above a narrow pit / vampire
- 046) In a winding sticky east-west passage to the outside / veneered cross
- 047) In a stone left ear
- 048) On the left cheek of the great stone face
- 049) On an enormous stone nose
- 050) On a smooth rock dome below a narrow path / enormous goat, ornate horn
- 051) In a sheltered gully
- 052) On the winding stairs A
- 053) On the winding stairs B
- 054) In a protected gully
- 055) In a north-south passage through glistening rock / lump of ore
- 056) Below the straight stairs
- 057) Half way up the straight stairs
- 058) At the top of the straight stairs
- 059) Outside the gate house
- 060) Beside a violet pedestal under the gate house
- 061) On a pedestal of violet light
- 062) On a pedestal of yellow light
- 063) Beside a yellow pedestal at the end of a long east-west corridor
- 064) Furth along the corridor corridor
- 065) At a junction where the corridor ends
- 066) In a neat panelled room with a cupboard to the south
- 067) In a cupboard / hollow stick, blue collar, jar of cold cream
- 068) In a tall cavern with openings all around
- 069) In a musty north-south corridor
- 070) On the floor of a cavern / liquid slime
- 071) Clinging to a rock face
- 072) Amongst psychedelic mushrooms on a wide ledge halfway up the south side of a tall cavern
- 073) Clingign to crumbling steps up the rock wall
- 074) At the end of an aqueduct leading north
- 075) In a dry north-south fissure
- 076) On a narrow north-south bridge
- 077) In a corridor bending south and east
- 078) In a long skin-lined room with a central mithril throne
- 079) In a sloping passage
- 080) On a ramp down the black tower
- 081) South of a dry marsh
- 082) On a mound of rubble
- 083) On a powdery peat beside a chasm
- 084) On a stony mound
- 085) Beside a muddy puddle / wisp
- 086) In the roc's nest / large rock crystal, silken rope, huge caterpillar
- 087) North of the dry marsh / mechanical mask
- 088) On a dry, powdery peat
- 089) On a pedestal of red light
- 090) In a filthy dead-end cell A / sliver of ranoid fried potatoes
- 091) In a filthy dead-end cell B / cracked pot
- 092) In a narrow east-west corridor
- 093) At a junction between north-south and east-west passages
- 094) In a giant rat's nest / star pendant
- 095) In a looted toolroom / hammer, bag of nails
- 096) In an oppressive chimney
- 097) Outside a hot alcove
- 098) In a hot alcove / sun medallion
- 099) On a magnificent golden pathway running north-south through the air / troll
- 100) On a narrow ledge between the splendid golden pathway and a narrow tunnel
- 101) In a narrow north-south passage through the rock
- 102) On a wide ledge outside a tunnel mouth
- 103) On a sturdy bridge across a cavern
- 104) On a wide ledge between a sturdy bridge and a fissure in the rock
- 105) In the troll's squalid cavern / sun medallion, some rare spices, red collar
- 106) South of an enourmous cavern floor beside some small grey mushrooms
- 107) In a giant ant's nest
- 108) North of the cavern below a huge mushroom
- 109) In a small fissure that narrows as it winds north
- 110) Crawling through small cracks leading west and south
- 111) In the strong room / securily-fastened treasure chest
- 112) On a pedestal of blue light
- 113) Below a blue pedestal / several wights
- 114) In the middle of the south wall of the wight house / several wights
- 115) In the crypt beside a rotting coffin / costly trident
- 116) In the north of the wight house / several wights
- 117) Just beside the doorway of the wight house at the north-west corner of a large gloomy room / several wights
- 118) Sitting on an ornate throne / nine numbered buttons
- 119) In the pit with wide cracks in the east wall / silver collar, evil green gem
- 120) At the bottom of a deep chasm where narrow cracks lead west and down
- 121) Below the throne in an odd little room / pair of lapis lazuli, small onyx, violet collar, mithril collar
- 122) On a pedestal of silvery light
- 123) On a paved north-south tunnel with a silver pedestal
- 124) In the salt cellar surrounded by pillars of salt / small salt pig
- 125) On a massive spiral ramp which twists down into dark waters and up into the gloom above

- 126) Standing in shallow water at the foot of the ramp / ladder, pearl
- 127) On the ramp A
- 128) On the ramp outside a doorway
- 129) In an empty room A
- 130) In an empty room B
- 131) In a treasure vault / topaz
- 132) On the ramp beside a doorway and sign
- 133) On the ramp outside an ornate doorway
- 134) Beside an abstract sculpture of hoops and loops
- 135) In an ornate dead-end room / rhinestone
- 136) On the ramp B / ladder
- 137) On the ramp C
- 138) In the skinner box / buttons 1 - 9, discreet notice
- 139) In the reward room with five numbered buttons
- 140) On the ramp outside an opening to a pale room
- 141) On the ramp outside a square doorway
- 142) In the box room / ornate box, opal
- 143) On the ramp outside a rubbery doorway
- 144) In a short east-west corridor
- 145) In a room surfaced with black glass / emerald
- 146) On the ramp outside a narrow doorway from which drifts a sharp acrid smell
- 147) On the ramp - a hand points into a narrow opening
- 148) Outside a long scratched room
- 149) On a wobbly section of ramp A
- 150) On a ramp outside a round opening
- 151) On the brink of a deep dark pit
- 152) On a wobbly section of ramp B
- 153) On the ramp outside a dark doorway
- 154) In a dead-end dark room with a black pedestal / wooden wedge, black sphere
- 155) On the ramp beside a doorway with holes up one edge
- 156) On the ramp outside a red-gold room
- 157) On a wide spiral ramp which descends clockwise round an immense pit
- 158) In a dead-end dark room / diamond, shield
- 159) A corpse hangs by one foot / leather gauntlet, leather blindfold
- 160) In a circular red-gold room / gold rings
- 161) In the east crusher room
- 162) In the west crusher room outside a treasure chamber
- 163) In the treasure chamber / agate
- 164) In a small soft room between five fleshy pillars / ruby
- 165) In a dusty room / elephant brooch
- 166) In the condemned cell / hooded executioner, amethyst
- 167) In the guard room / black hood
- 168) In the exit chamber

That's it about the locations of the enclosed printed plan and the objects found therein (some useful others less). Now we'll get on the scene and start ... On a wide stone bridge. From here we go on like this:

IN - IN - TAKE CHANDELIER - (the entire room is inverted) - E - PRESS BUTTON - (a copy of our body will now be created) - OUT - UP - N - N - N - N - TAKE ALL - (the helmet gives us a

permanent light source - but it will be needed later) - S - S - S - S - S - W - W - TAKE SEED - (caution - the seeds are explosive!) - E - E - E - N - WAVE SEED - (we cause some loud explosions - these make us deaf at times) - N - (the siren disappears) - TAKE MIRROR - (the tree in the north is an absolutely deadly weeping pasture with six arms, so it is necessary to throw six objects in this direction beforehand to make them harmless) - THROW SEED - THROW CRUCIFIX - THROW HELMET - (all taken by the tree and carried away) - S - S - E - E - (a sleeping spell hits us, but the mirror reflects it) - S - (we scare away a masked fellow, who is lounging around here) - TAKE ALL - (we notice that the cubes are "loaded" and this will prove very useful later on) - N - W - N - UP - (these berries are really suitable for throwing them at the giants, but since we can not carry anything, we throw the dice - the effect is the same!) - DROP DICE - (now the giants run away) - DOWN - N - TAKE BELT - WEAR BELT - (now we can carry more) - TAKE DICE - S - S - W - N - N - THROW DICE - THROW COINS - THROW MIRROR - (all the arms of the weeping willow are now full, and so it is safe for us) - N - TAKE AXE - CUT TREE - (we are asked by Dryad to leave the tree alone) - YES - (we get a carving and it causes the tree to drop all objects) - TAKE ALL - WEAR HELMET - S - S - (we notice that the sunset is imminent) - S - W - W - W - S - W - WAIT - (their leader wants to play a game with us) - YES - (with our special dices we win of course) - E - E - E - WAVE SEED - (due to the explosions, the blown up yellow bird disappears) - UP - TAKE EGG - DOWN - N - W - N - DOWN - DROP SEED - TAKE CASE - TAKE DRIFTWOOD - UP - (the sunset is now happening but soon we will get a temporary light source) - N - N - N - LIGHT DRIFTWOOD - (the treasure hideout in the east is a trap) - DROP CASE - IN - IN - TAKE CHANDELIER - E - DROP CARVING - DROP COINS - DROP EGG - DROP MIRROR - DROP AXE - PRESS BUTTON - OUT - TAKE CASE - N - N - W - SEARCH CORPSE - WEAR ORANGE - TAKE ALL - E - SE - NE - THROW CORPSE - SW - PUSH STONE - PUSH STONE - PUSH STONE - (the barrier moves) - E - PRESS BOULDER - (the moss falls off from the walls) - E - TAKE SWORD - W - NW - NW - TAKE FIGURINE - SE - NE - (the octopus allows us to see something) - TAKE STAFF - SW - W - W - TAKE CUBE - (the cube is magnetic) - E - E - E - E - SEARCH HAYSTACK - (we find a jewel-filled needle) - DROP CASE - TAKE NEEDLE - IN - IN - TAKE CHANDELIER - E - DROP NEEDLE - DROP CUBE - DROP DICE - PRESS BUTTON - OUT - TAKE CASE - W - W - SW - UP - UP - WAVE STAFF - (the skeletons disappear and the dwarf offers us to find in return a rich ezder for us) - WAVE WAND - (this causes the pebble thrower in the southeast to crumble) - SE - (the dwarf follows us from now on) - WEAR GREEN - TAKE CHAIR - NW - UP - KILL DRAGON - TAKE ALL - DROP CASE - IN - IN - TAKE CHANDELIER - E - DROP BED - DROP TEETH - DROP CHAIR - DROP STAFF - DROP WAND - DROP FIGURINE - PRESS BUTTON - OUT - TAKE CASE - DOWN - N - (the vampire covers in front of our cross) - W -

TAKE CROSS - E - THROW CROSS – (the vampire is dead) -
 TAKE CROSS - E - OUT - W - W - UP - UP - (if, from now on,
 we hear that there are boulders coming from above, we hide in
 the next possible deepening, and wait until the stones are safely
 past our cover. We are now safe and hear the sound of the
 boulders from below) - UP - UP - UP - (th e dwarf finds a secret
 entrance in the rock) - IN - TAKE ORE - DROP CASE - IN - IN -
 TAKE CHANDELIER - E - DROP ORE - DROP CROSS - DROP
 CRUCIFIX - PRESS BUTTON - OUT - TAKE CASE - S - (when
 we hear again the sound of rubble from above, we hide again
 as before) - UP - UP - UP - UP - N - (somebody wants to know a
 password) - PASSWORD (that was easy) - N - UP - SAY
 YELLOW - (we teleport to the yellow base) - DOWN - W - W -
 W - S - TAKE STICK - N - E - E - E - E - N - N - UP - UP - UP -
 UP - S - S - S - (The same old story with the rubble - for us now
 no more a problem) - UP - UP - UP - UP - N - N – (it can
 happen that at this point we will be asked for a lenslock test –
 good luck!!) - BLOW STICK - (the blowing whistle opens the
 door) - N - E - S - DOWN - DOWN - N - N - N - E - TAKE WISP
 - (from now on we have a permanent light source!!) - W - (the
 bird should bring us into his nest) - TAKE CATERPILLAR -
 SQUEEZE CATERPILLAR - (a silk ribbon appears!) - DROP
 CATERPILLAR - TAKE ROPE - TAKE CRYSTAL - DROP CASE
 - IN - IN - TAKE CHANDELIER - E - DROP STICK - DROP
 CRYSTAL - DROP DRIFTWOOD - PRESS BUTTON - OUT -
 TAKE CASE - TIE ROPE TO NEST - DOWN - LOOK - (we get a
 smashed silver mask) - TAKE MASK - S - S - S - W - S - UP -
 UP - N - W - S - S - UP - SAY RED – (we teleport to the red
 base) - DOWN - SE - NE - W - W - S - TAKE SLIVER - N - W -
 W - S - TAKE BLUE - WEAR BLUE - (The blue base is in the
 middle of the house of the gnome, so we need the cross and
 the crucifix!) - TAKE CREAM - N - E - E - E - S - TAKE POT –
 (just don't leave it somewhere!) - N - E - E - E - (The rat flees in
 front of the potato column – you heard the story about rats and
 chips?) - N - TAKE PENDANT - DROP CASE - IN - IN - TAKE
 CHANDELIER - E - DROP MASK - DROP SLIVER - DROP
 PENDANT - TAKE CROSS - TAKE CRUCIFIX - PRESS
 BUTTON - OUT - TAKE CASE - S - W - W - SE - TAKE ALL -
 NW - WEAR CREAM - (we lubricate ourselves everywhere,
 because it protects us from heat) - UP - UP - IN - TAKE
 MEDALLION - OUT - DOWN - DOWN - N - N - FILL POT - (with
 the existing slime) - UP - UP - EAT MUSHROOMS - (they are a
 drug and the illusion of a golden path replaces the rotten bridge)
 - N - (the troll wants to be paid for) - GIVE MEDALLION - N - N -
 N - N - N - (we run against invisible mushrooms) - EAT
 MUSHROOMS – (now we are invisible) - S - S - S - W - TAKE
 SPICES - TAKE MEDALLION - E - N - DOWN - (now we are
 visible again) - EAT MUSHROOMS - (we shrink and all our
 worldly items fall to the ground. We notice how the broken pot
 cleverly disappears in a corner!) - N - N - (the ants ignore us) -
 EAT MUSHROOMS - EAT MUSHROOMS - (we are now a giant
 and on the way back we crush the ants) - S - S - (now we are

slowly shrinking to our normal size and doing a small task) - EAT
 MUSHROOMS - UP - N - N - N - N - W - OPEN DOOR - (at the
 moment we forget the box - we have to come back from the
 other side of the door) - E - S - S - S - S - DOWN - N - N - EAT
 MUSHROOM – (we want to grow back to our normal size) - S -
 S - TAKE BELT - WEAR BELT - WEAR HELMET - WEAR BLUE
 - TAKE ALL - (in the original version, you first have to pick up
 the belt and then pick up each item individually) - DROP CASE -
 IN - IN - TAKE CHANDELIER - E - DROP MEDALLION - DROP
 SPICES - DROP BOW - PRESS BUTTON - OUT - TAKE CASE
 - UP - S - S - S - S - DOWN - DOWN - S - S - W - UP - SAY
 BLUE - (we teleport to the blue base) - DOWN - S - S - SHUT
 COFFIN - (will be secured by hammer and nails. So we protect
 ourselves from attacks by the zombies!) - TAKE TRIDENT - N -
 N - N - W - N - UP - DROP POT - (it will break and the slime
 previously collected therein will run out) - TAKE HORN - (for the
 goat!!) - UP - (now comes the place with the rubble again -
 everything is already well-known) - UP - UP - UP - UP - UP - UP
 - UP - N - N - N - E - UP PUSH BUTTON 9 - LOOK - (we are
 now in the pit) - WEAR SILVER - TAKE GEM - (the demon
 inside tries to attack our mind!!) - HIT GEM - (that's what the
 hammer is good for) - E - E - N - S - S - W - S - UP - UP - N -
 UP - PUSH BUTTON 4 - (the throne passes through a trapdoor
 and we are in a strange little room) - DOWN - WEAR MITHRIL -
 DROP HAMMER - TAKE LAPIS - TAKE ONYX - DROP CASE -
 IN - IN - TAKE CHANDELIER - E - DROP LAPIS - DROP ONYX
 - DROP CRUCIFIX - DROP TRIDENT - DROP CROSS -
 PRESS BUTTON - OUT - TAKE CASE - UP - SAY SILVER - (we
 teleport to the silver base) - DOWN - E - (through the armored
 door from which we had previously removed the bolts) - TAKE
 CHEST - W - DROP CASE - IN - IN - TAKE CHANDELIER - E -
 DROP CHEST - PRESS BUTTON - OUT - TAKE CASE - N -
 TAKE PIG - E - DOWN - DROP PIG - (it disappears) - LOOK -
 TAKE PEARL - UP - UP - UP - E - UP - E - TAKE TOPAZ - W -
 W - UP - UP - E - TURN SCULPTURE - (there is an opening in
 the east) - E - TAKE RHINESTONE - W - W - DOWN - DOWN -
 DOWN - DOWN - DOWN - N - DOWN - IN - PRESS BUTTON 9
 - PRESS BUTTON 4 - INVENTORY - (there is a Saphir) - UP -
 UP - UP - UP - IN - TAKE BOX - OUT - DOWN - DOWN -
 DOWN - S - DROP BOX - (we drown the snake which is inside)
 - OPEN BOX - TAKE OPAL - N - UP - UP - UP - UP - IN - E -
 TAKE EMERALD - W - OUT - UP - UP - UP - UP - UP - IN (the
 rock cannot harm us) - OUT - UP - UP - IN - (a black sphere will
 follow us from now on) - OUT - UP - UP - UP - CLOSE EYES -
 (so we do not see what else we would see) - N - (the black
 sphere collides with the other and they destroy each other!) -
 OPEN EYES - TAKE DIAMOND - DROP CASE - IN - IN - TAKE
 CHANDELIER - E - DROP TOPAZ - DROP DIAMOND - DROP
 OPAL - DROP RHINESTONE - DROP EMERALD - DROP
 PEARL - DROP SAPPHIRE - PRESS BUTTON - OUT - TAKE
 CASE - TAKE SHIELD - S - CLOSE EYES - DOWN - OPEN
 EYES - DOWN - IN – (the shield protects us from the

spearheads) - SEARCH CORPSE - TAKE BLINDFOLD - TAKE GAUNTLET - OUT - UP - IN - WEAR GAUNTLET - (this protects our hand from the ring) - TAKE RING - OUT - DOWN - DOWN - IN - TAKE WEDGE - OUT - DOWN - DOWN - IN - (the rubbles can not affect us this time either) - OUT - DOWN - DOWN - IN - DROP WEDGE - OUT - W - W - (in the west is the treasure chamber) - TAKE AGATE - E - E - E - DOWN - THROW RING INTO OPENING - (to hang the meat) - IN - TAKE RUBY - OUT - DOWN - WEAR BLINDFOLD - IN - (the acid destroys our eye patch but not our eyes) - TAKE BROOCH - OUT - DOWN - DOWN - DOWN - IN - THROW BROOCH - (The elephant expands and makes the executioner flat) - TAKE AMETHYST - W - TAKE HOOD - (don't wear it) - N - DOWN - DOWN - S - UP - UP - UP - UP - (here is the exit) - DROP CASE - IN - IN - TAKE CHANDELIER - E - DROP HORN - DROP SHIELD - DROP HOOD - DROP GAUNTLET - TAKE SAPPHIRE - TAKE EMERALD - TAKE OPAL - TAKE DIAMOND - TAKE PEARL - TAKE TOPAZ - (we have now nine jewel stones) - PRESS BUTTON - OUT - TAKE CASE - IN - (we have survived the central treaty, but there is only one way out) - DROP CASE - IN - IN - TAKE CHANDELIER - E - DROP PEARL - DROP OPAL - DROP SAPPHIRE - DROP EMERALD - DROP AGATE - DROP AMETHYST - DROP DIAMOND - DROP RUBY - DROP TOPAZ - TAKE CRUCIFIX - TAKE CROSS - TAKE TEETH - TAKE HORN - PRESS BUTTON - OUT - TAKE CASE - E - UP - SAY RED - (we teleport to the red base) - DOWN - S - S - S - S - S - S - BLOW HORN - E - E - E - E.....

(an empty voice appears: "This is your referee speaking. If you continue on this road you will return safe to civilisation and the game will end. Are you sure that you want to?") - YES.

FINAL Message

"YOUR SCORE IS 600 OUT OF 600"

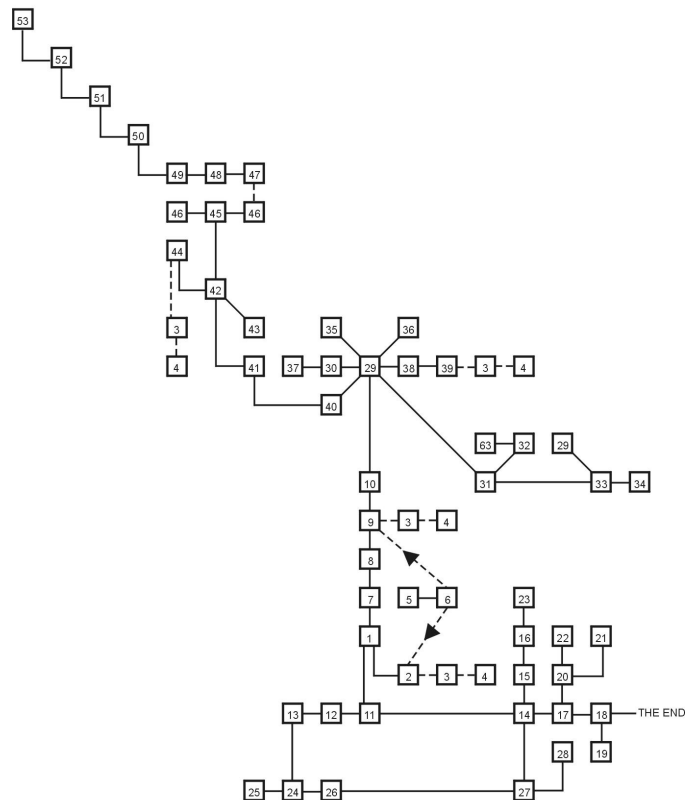
"ALL HAIL TO THEE, GRANDMASTER ADVENTURER"

And that was it from our side to this rather ambitious work. Until next time again in our club magazine with a new adventure.

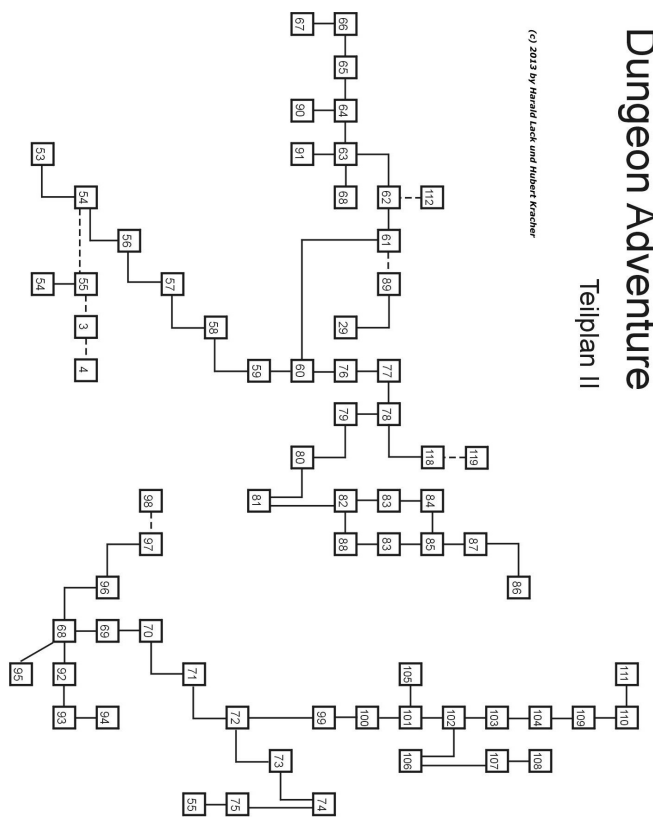
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Dungeon Adventure

Teilplan I



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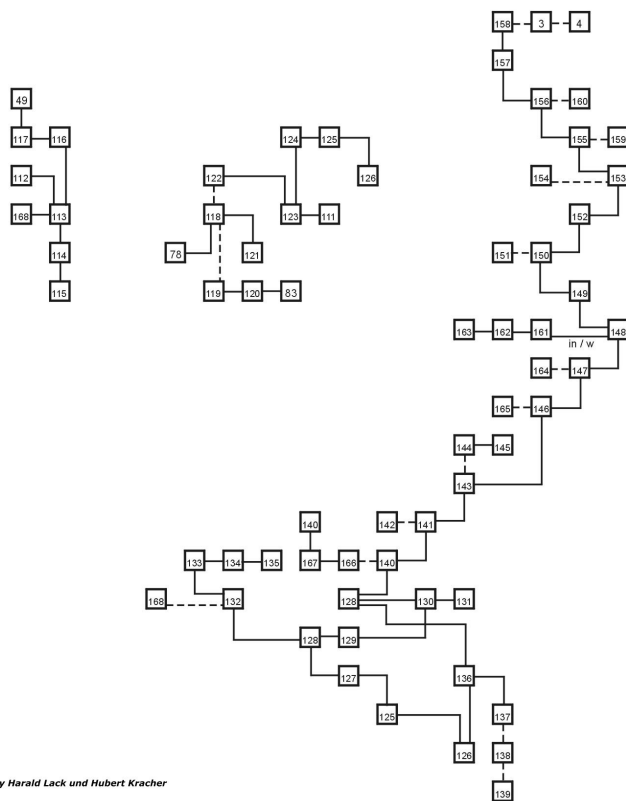
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Dungeon Adventure

Teilplan II

Dungeon Adventure

Teilplan III



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Dear club members!

It is once again adventure time here in the club. Today, the program has been named "Kayleth" and, as far as we know, was an adventure classic. Released by the software company Adventuresoft, the game was once again transformed into a fictitious, sombre future. The hero of the game have, as so often, the honoured mission to save the civilization, or what is left from it. Kayleth is an extraterrestrial force that builds its empire on an army of Androids. We seem to be one of these machine men, because during the programm we receive some reprogramming. But we seem to have fallen into disgrace on the system, because our mission is even at the beginning in a very difficult position for us. More about this later. So our goal is to end the power of Kayleth in one way or another and repopulate the planet (it is not necessarily the good old earth - so we are not that important for the universe. But this is not necessarily made easy for us in this game and a lot of rather difficult puzzles are to be solved until the final defeat of our seemingly overpowering enemy. But now we do not want to stay with the preface anymore and dedicate ourselves to the printed plan with its locations. There are a total of 76 and they are described as follows:

- 01) Lying spreadeagled on a conveyorbelt
- 02) Surrounded by the conveyors and complex machinery on an android production unit / tape
- 03) In the production controll unit / small lever
- 04) In the parts supply annex / circuit fuse
- 05) In a warehouse / inoperative androids
- 06) In the android conditioning unit / reclining chair, pair of gloves
- 07) In the cartridge room / reflective sheet, cabinets, micro canister
- 08) In a corridor A / service apperture, Dexta, Serta, Masta
- 09) In an azap chamber A / keypad
- 10) Outside a closed service apperture on the outer hull of the cruiser Kromar
- 11) On the ships outer hull
- 12) On the bridge / iris door
- 13) In an azap chamber B
- 14) In a corridor B / pyxis, elevator
- 15) In the zyron selection centre / sleepers, selection unit
- 16) In an azap chamber C
- 17) In an elevator / panel
- 18) In a laboratory / Yagmok, badge
- 19) In a cryogenic store room / plasi caskets, pyramid
- 20) In the mind facsimile section / steel dome
- 21) On the edge of Zymoria
- 22) On a rutted track
- 23) Outside the walled shanty town of Zymogg
- 24) In Zymogg
- 25) Standing in the oblivion inn / Broznak, qnuts
- 26) Inside a container dwelling / manual, debris
- 27) Standing before an expanse of barren ground
- 28) In a stark landscape of mummified trees and blackened earth / physem nodule
- 29) On the rim of a massive crater
- 30) Standing in the white powdery ash of a massive crater / ash, steel ball
- 31) On in a gully that slopes down towards the beach
- 32) On a beach that has luminous sand
- 33) On the edge of a giant causeway
- 34) In a roughly hewn tunnel / solid door
- 35) In a small chamber A / rudimentary shelves, spray suit, cube, whiffy bar
- 36) In a gigantic cavern / skimmer
- 37) On a pebble beach of Yagmok's island A / skimmer
- 38) On a pebble beach of Yagmok's island B
- 39) Surrounded by the blackened ruins of a burnt-out house / steel hatch, rubble
- 40) In a dank basement / Dribble
- 41) In a dark dank basement
- 42) In a red passageway
- 43) In the stomach of a rock gullet
- 44) In an underground store room / hoop
- 45) In Yagmok's living quarters / corona coat
- 46) Travelling a disused and overgrown track A
- 47) Travelling a disused and overgrown track B
- 48) On the border of Twin Peril forest

- 49) In a forest of grotesque trees
- 50) Deep in Twin Peril forest / Mokki Ray
- 51) In a clearing near a gigantic gnarled tree
- 52) On a high bough of the ancient tree / small arched door, lenses, marble tablet, rod
- 53) In a southerly corridor
- 54) On a rocky knoll
- 55) Outside the ancient citadel of Zenron A
- 56) Outside the ancient citadel of Zenron B / ferocious Zemps
- 57) In the ruins / dime
- 58) In an old derelict hall / low silver socle
- 59) In a crystal passageway
- 60) In the Zenron temple / Mortar, noray pod
- 61) Inside a cuboid
- 62) In a videodrome / bottle
- 63) In a dome / compost, seeds
- 64) In the guard dome / hover plate
- 65) In Chromazin Reprocessing / c-emzs machines, tube
- 66) At the bottom of a shaft
- 67) In the depths of the mine A
- 68) In the depths of the mine B
- 69) At a dead end / slime pool, photon cutter
- 70) At the face of the mine / chunk of ore
- 71) In a green spiral tunnel A
- 72) In a green spiral tunnel B
- 73) In a small chamber B
- 74) In a void
- 75) In a clearing within a landscape of gigantic trees / bulb
- 76) In Kayleth's inner sanctum

That's it about the locations of the plan and the objects that can be found in it. As you can see from this, it's pretty futuristic, and all our efforts will be necessary to decide the adventure for us. Although there are "only" 76 locations, Kayleth's solution is quite extensive. We should not lose any more time and immediately rescue the population. Starting from our start location (Strapped on a conveyor belt), we go on like this:

Get off (we notice that we are held by steel bands), break bands (at least the arms are now free), get off, U, pull lever (the sirens are now turned off and the menacing android disappears), D, examine machinery, take tape, examine tape, N, take fuse, E, examine android (we notice that each android has a small slit in the head and two ebony-colored eyes), E, examine chair (we discover a button at the side), turn knob (the chair folds back and we discover a pair of gloves), take gloves, examine gloves (the inscription reads: ALKI 33 - freely translated means that they are designed for working with alkaline substances), S, examine sheet (our own data record is empty and now we have the certainty - we are an android as well), examine cabinet, take canister, examine canister (we see that the corners are welded), W, examine aperture (A blue eye has been painted on this side).

D, examine chamber (a keypad can be seen), examine keypad (the operating instructions are: Type: Azap Code followed by

three code letters - we should remind that later), U, wear gloves, open tape (it begins to dissolve), put tape on canister (the tape will also dissolve the canister without attacking its content - in it are three small program modules), take dexta, take sarta, take masta, insert sarta (We are now programmed as a service droid), I (we have glowing blue eyes and can now enlarge the opening), open aperture (we pass through the outer shell of Kromar - the program has made our feet precautionary magnetic), examine aperture (there is written: A.C.ROO and "A.C. means Azap Code) U, examine aperture (here is written A.C. DHT), open aperture (we pass to the bridge), examine door (the lock is code-protected to prevent adroids from opening the door - behind it, Kayleth is hidden, but there is still a lot to do before we can overcome this obstacle).

Examine controls (On the guard button is "Data Zap Section ELY"), remove sarta, insert masta (We have now slipped into the role of a guardian-android), I (now we have the yellow eyes - almost like Lt. Commander Data from the Enterprise), push button (3D images of Zyroneons flash on - in one we see our earlier being -Yurek!), D, azap code ely (we get teleported, U, take pyxis, examine pyxis (we are informed that you can open the small wooden can), W, examine unit (here we are told that the Zyroneons are melted down here and form the large pool by their liquid - almost like the great connection at Deep Space Nine), examine sleepers (there are uninvolved Zyroneons with the inscription "Reject for DX"), S (this Azap chamber can not be used - let's think about the DX - we should now know what's going on), N, E, enter elevator, examine panel (On the keys is written G, M1 and M2 - we are currently on M1, as we could see from the location description on entering the lift).

Press M2, leave elevator (we meet Yagmok), remove masta, talk to Yagmok (he tells us that he has perhaps the solution to our problem ... but he speaks a somewhat extended language, which can be interpreted only by moving the letters one by one, for example, TLJN would be called skim - his complete message is then: Skim the sea, find the coat, ride the ring, then down the throat. Now that he has said that he has the key to our problem ...), ask Yagmok for key (he gives us some kind of badge), take badge, examine badge (a key badge), N, take pyramid, examine pyramid (it is small and silvery), examine caskets (inside are Zyroneons), S, W, examine dome (it has a cut that looks like a body), examine indentation, E, enter elevator, press G, leave elevator (ah - the doors to get out), drop gloves, drop pyxis, drop pyramid, wear badge, S, S, go archway (Our body is enveloped by RAD rays as we pass through the triumphal arch - the significance of which will be learned later), S, take qnuts, N, W, take manual, read manual (in the chapter High Knots is written: "Flip for quick release"), drop manual, examine debris, (we see our old Zyroneonic image), E, NW (they ask us if we are really sure), yes.

N, examine earth, take nodule, examine nodule (we learn that it ignites on impact), N, D, examine ash (we find a steel ball), drop fuse, take ball, U, drop ball, D, take fuse, U, W, D, E, enter

tunnel, insert dexta (our programming makes us from now on a destroyer droid with plasma weapon), I (we have red eyes), fire plasma (our eyes blow a hole in the door), E, examine shelves, take suit, wear suit (which prevents we burn while we glide over the acid lake), D, board skimmer, wear skimmer (strangely we need right now an igniter) insert fuse in skimmer, start skimmer (we cross the sea and get to Yagmoks' island), SW, E, examine rubble (we discover a hatch), examine hatch, open hatch (here it is important to wear the label while we do that), D (Dribble is here), give qnuts to Dribble, D, D, E (we run the risk of being digested), drop nodule (it takes us into an underground storage room), E, take coat, examine coat (fits in the year 105 b.k. - this might be called „Before Kayleth“), examine quarters (we see the inscription A.C. EPO), W, examine hoop (we should remember what Yagmok told us), ride ring (the ring brings us safely back to the dark dank basement), U, U, W, NE, drop badge, board skimmer, start skimmer, drop suit, U, take cube, examine cube (also small and silvery), take bar, examine bar (smells at each end for "goo" and a small crank to rotate attached thereto), W, D, W, U, E, take ball, S, S, W, SE, go archway, N, N, drop ball, drop coat, take pyxis, N, N, NE (we are overgrown slowly from a winch), N, E (here is our "Twin Peril"), spin bar (It emanates the scent of deceiving meat and the Mokki-Ray snaps the bar), E, climb tree, examine door (there is a knot under the carved eyeless face), open pyxis (again, the question arises whether we are sure), yes (the container opens and micro lenses fall out, which expand on contact with the air), drop pyxis, take lenses, wear lenses, (now there is complete darkness), flip knot (again the well-known question ...), yes (the door opens and a glaring dazzling light emerges - the lenses protect our eyes and we recognize a marble tablet inside the tree), take tablet (the bright light disappears), remove lenses, examine tablet (we see the letters "AKN" and that is the riddle of what we should do next), break tablet (a staff comes to light), take rod, examine rod (small and silvery), D.

W, SW, S, S, enter elevator, press M1 (back to level minus 1), leave elevator, D, azap code EPO (we teleport), U, fire plasma (the exit is now free and we can not go further than droids), D, azap code AKN, U, SE, W (we are now surrounded by wild zemps), whirl cord (it produces a high-frequency sound that drives the zemps), S, take dime, W (the walls are now approaching), enter socle (a voice whispers: "To be with me, drop the silver three"), drop rod, drop cube, drop pyramid (the socle descends), D (the High Priest tells us "Of my gifts, one will help you out. Take the crater creator to the Astechs!") take mortar, examine mortar (it is automatic and it needs seeds that are thrown in), take pod, examine pod (to eat as a protection from all possible rays), U, enter socle.

E, N, E, NW, D, azap code ELY (again a teleport), U, enter elevator, press G (back to the lowest level), leave elevator, S, S, go archway, drop lenses, remove dexta, S, talk to Broznak, give dime to Broznak (he shows us something), E, take bottle, examine bottle (contains contaminated Zyroneon water), examine screen (we learn, that "Kayleth" means life), W, N, N,

go archway, E, drop bottle, drop mortar, W, N, N, take coat, S, examine dome (there is a graffiti on it, you can read: "Up yours, Overseer"), insert sarta (now we behave like a service droid), enter dome, E, examine machines (they are made to convert C-emzs, but you must first place ore on the chute before it enters action), remove sarta, inset masta (we are now an Overseer-Droid), W, enter, hover (we go down, but it is too dark to recognize anything), wear coat (it glows), D, SW, S, examine pool (we find a cutting torch), take cutter, examine cutter (for cutting rocks) N, NE, D, cut rock (we move a lump of ore), take ore, drop cutter, U, U, remove masta, insert sarta (we are again a service droid) enter hover, E, place ore in chute, press button (the machine starts production).

Take tube, W, SW, S, go archway, W, give pod to Yurek (he eats them, and from then on begins to look more hopeful), take Yurek, E, go archway (with the help of the pod Yurek is protected from the rays), N, N, enter elevator, press M2 (let's go down to level minus 2), leave elevator, W, insert tube in indent, insert Yurek in indent (now we are Yurek and we are in rather good condition), E, enter elevator, press G (again back to the lowest level), leave elevator, take ball, enter elevator, press M1 (back to level minus 1), leave elevator, D, azap code EPO (let's teleport again), U, S (we are suddenly sucked into a green spiral tunnel), D, D, put ball in hole (we awaken in a strange emptiness face to face with an asterian technician), examine technician (he says: With the ball in the right place, we can complete our task of repopulating this devastated planet. You must poison Kayleth's life blood with the essence of TAE. You will find the tubercle, then raise it we are suddenly in a clearing).

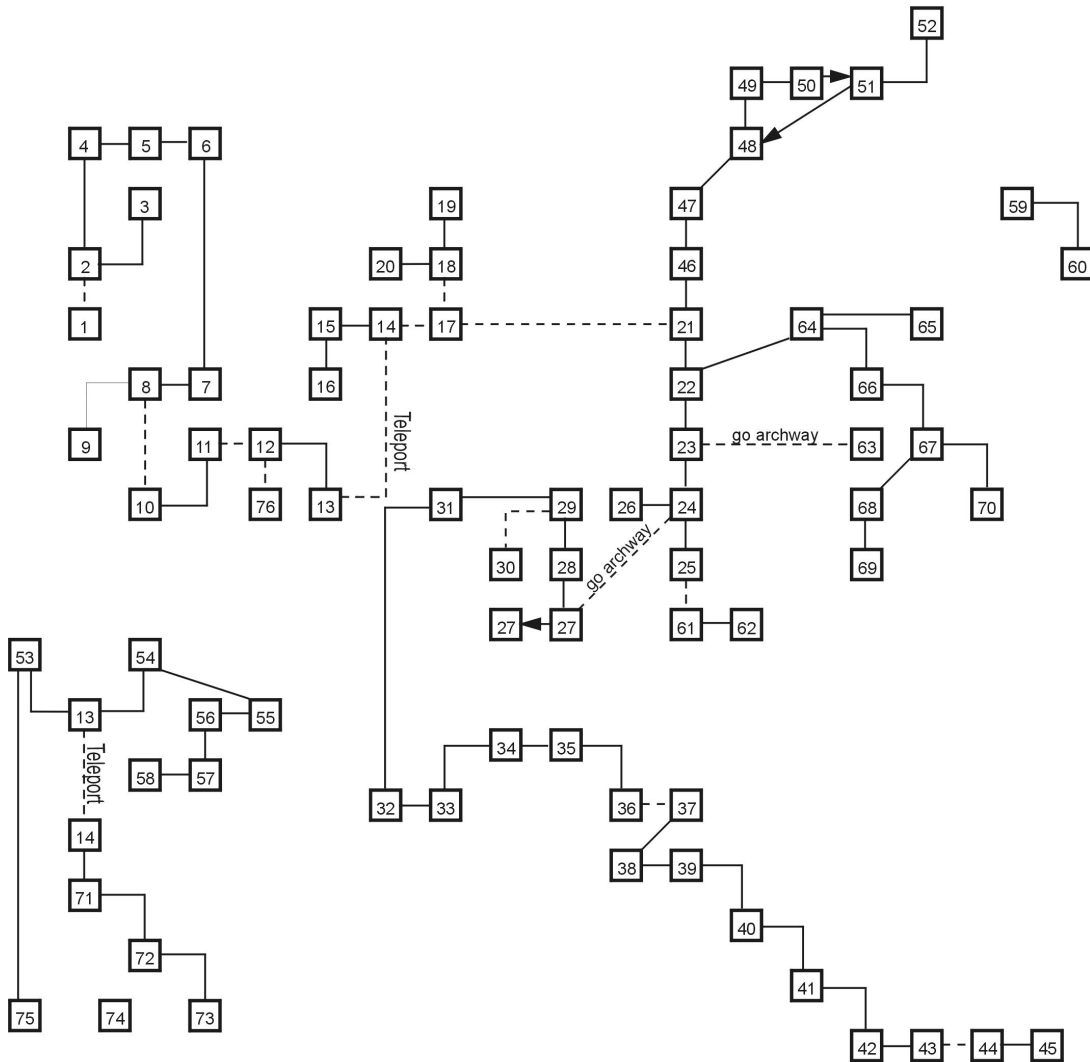
Take bulb, N, D, azap code ELY (the known teleport), U, enter elevator, press G, leave elevator, S, S, E, take compost, examine compost, take bottle, pour water on compost (he blows up), plant bulb in compost (it begins to grow), wait (about eleven to twelve times, in total as long as the TAE flower rises), take mortar, take seeds, drop seeds in mortar (we are told that we have now Kayleth's death certificate), I (the TAE essence is there), drop mortar, drop bottle, W, N, N, enter elevator, press M1, leave elevator, D, azap code DHT (Teleport!), U, help (we are told that we should read all the codes backwards - these are ROO, DHT, ELY, AKN, EPO: Open Kayleth door!!!), open kayleth door (we are now in the inner sanctuary of Kayleth), drop essence in pool.

We get the FINAL MESSAGE

"The Maxima Pool turns red. Kayleth's form begins to swell. Kayleth bursts. His reigns over. Yours has just began. Yurek the Great! Well done!"

So that's it finally. The solution to Kayleth, a program that is quite ambitious, as we are talking about, but now you have to deal with the solution. We are now working on the solution of another Adventures. See you!....

Kayleth



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STOP PRESS

Spectrum-Next Crowdfunding successful



The development of the new Super Spectrum "Spectrum Next" has been completed, now the project is financed. A production of 250,000 British pounds was promised at KICKSTARTER. Already after 1 days (exactly 35 hours) this goal was more than fulfilled and over 1000 devices sold.

Meantime the campaign is over and over 3000 units are sold with a total value of about 750.000 GBP.

The Spectrum NEXT will come, but the delivery time is still in 2018 (supposedly January, but let's not too optimistic).

Probably a few machines will appear on Ebay and also SINTECH ordered a small number of machines which will go into sale, but after all the demand is surely higher. However, as it seems there will be no other place to buy the machines from.

<https://www.kickstarter.com/projects/1835143999/zx-spectrum-next>